





The Rocky Flats Dictionary

DEPARTMENT OF ENERGY

**DOE ORDER DEFINITIONS —
A REFERENCE GUIDE**

Second Edition

DEPARTMENT OF ENERGY (DOE) DEFINITIONS

INTRODUCTION

This section is a compilation of terms, and their definitions from DOE Orders. The reference for each definition is provided in parentheses immediately following each definition so that the reader can determine the context in which the term is used by DOE. When more than one definition is provided, the preferred usage is not implied by the sequence in which the definitions appear. If two or more references are listed with definitions that contain minor differences in wording (so as not to warrant listing as separate definitions), then the difference and its respective reference are underlined. Three periods (...) are used when a reference also contains all of the definition immediately preceding it. The intent is to provide the exact definition as found in the reference source.

When applicable, cross references within this section have been identified; the source document should be consulted where there is a reference to see another section (i.e., See Page I-4, Figure 1-2 for examples) for additional information. The DOE Order should be consulted if detailed subject matter information is needed. The subject matter must be known before determining if the word in this section is appropriate for its intended use.

DOE ORDER DEFINITIONS

A

Abandonment in place

The discontinued use of a facility without physical removal. Such abandonment must be documented to show conformance with 41 CFR 101-47.5, Abandonment, Destruction, or Donation to Public Bodies. (4300.1B)

Abatement plan

An agenda containing identified unsafe or unhealthful working conditions, a proposed timetable for their correction, and a summary of steps being taken in the interim to protect employees. (3790.1A)

Abbreviated Internal Control Review (AICR)

An examination of internal controls to determine whether they are in place and working effectively. It is performed when the detailed activity of concern or the problem is known but the solution is not known. It must include testing of internal controls which are of significance to the activity being reviewed. It is less structured and less comprehensive than an Internal Control Review. (1000.3B)

Abnormal environment

Those environments as defined in a weapon's stockpile-to-target-sequence and military characteristics in which the weapon is not expected to retain full operational reliability. In DOE manufacturing, testing, and transportation operations, abnormal environment means an environment that a nuclear explosive is not expected to experience during operations. (5610.11)
(5610.10)

Abnormal operation

A situation in which emission rates are altered because of anticipated but random changes in normal plant operating conditions. (5400.XY)

Abrupt (theft or diversion)

Theft or diversion resulting from a single occurrence. (5633.3, Change 1)

Absorbed dose

The energy imparted to matter by ionizing radiation per unit mass of irradiated material at the place of interest in that material. The absorbed dose is expressed in units of rad (gray) where 1 rad = 0.01 joule/kg material (1 gray = 100 rad). (5400.XY)

Acceptance sampling

Acceptance sampling

The procedure by which decisions to accept or reject a sampled lot or population are made based on the results of a sample inspection. (5400.XY)

Accepted risk

1: The acknowledgment that the effectiveness of the current protection system is at a level such that the potential for loss of some safeguards and security interests is acceptably minimized. (5630.13); 2: The level of risk that is acceptable to all parties in reference to vulnerabilities on the defined deficiencies on security concerns. (5632.1A)

Access

1: That proximate to a nuclear explosive that affords a person the opportunity to tamper with it or to cause a detonation. (5610.11); 2: That proximity to a nuclear explosive which affords a person the opportunity to tamper with or activate a critical component. (5610.3); 3: Also refers to the following:

- (a) the knowledge, use, or possession of classified information required by an individual to perform his/her official duties and which is provided to the individual on a need-to-know basis;
- (b) situations that may provide an individual proximity to or control over special nuclear material in quantities defined in the DOE 5632 Order series.

(5631.2B)

Access authorization or security clearance

1: An administrative determination (made by DOE) that an individual is eligible for access to Restricted Data, other classified information, or special nuclear material. (3220); 2: . . . The individual may be a DOE employee or an applicant for DOE employment, a consultant, an assignee, another Federal department or agency employee (or other persons designated by the Secretary of Energy), or a DOE contractor or subcontractor employee. Clearances granted by DOE are designated as "Q," "L," "Top Secret," or "Secret." (5631.1A);

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Access authorization or security clearance

Access authorization or security clearance (continued)

3: An administrative determination that an individual who is either a DOE employee, applicant for employment, consultant, assignee, other Federal department or agency employee (and other persons who may be designated by the Secretary of Energy), or a DOE contractor or subcontractor employee, is eligible for access to restricted data, other classified information, or special nuclear material. Clearances granted by the DOE are designated as "Q," "L," "Top Secret," or "Secret." (5631.4); 4: An administrative determination that an individual who is either a DOE employee, applicant for employment, consultant, assignee, other Federal department or agency employee, DOE contractor or subcontractor employee, or the person designated by the Secretary is eligible for access to classified information or special nuclear material. Clearance(s) granted by the Department are designated as "Q", "L", "Top Secret", or "Secret". See DOE 5631 series. (5635.1A) (1500.3); 5: An administrative determination that an individual is eligible for access to classified information or special nuclear material. Clearances granted by the Department are designated "Q", "L", "Top Secret", or "Secret".

- (a) **Q access authorizations or clearances** Based on full field investigations conducted by the Federal Bureau of Investigation (FBI), OPM, or another Government agency that conducts personnel security investigations. Q clearances permit an individual to have access, on a need-to-know basis, to Top Secret, Secret, and Confidential levels of Restricted Data, Formerly Restricted Data, National Security Information, or special nuclear material as required in the performance of duties. When Q access authorizations or clearances are granted to employees of access permit holders the clearances are identified as Q(X) access authorizations or clearances and permit access only to the type of Secret or Confidential Restricted Data specified in the permit.
- (b) **Top secret access authorizations or clearances** Based on full field investigations conducted by OPM or another Government agency which conducts personnel security investigations. Top Secret clearances permit an individual to have access, on a need-to-know basis, to Top Secret, Secret, and Confidential levels of National Security Information and Formerly Restricted Data as required in the performance of duties.

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Access authorization or security clearance

Access authorization or security clearance (continued)

- (c) **L access authorizations or clearances** Based on National Agency Check and Inquiries with Credit for Federal employees, or National Agency Check with Credit for non-Federal employees, conducted by the OPM. L clearances permit an individual access, on a need-to-know basis, to: Confidential Restricted Data; Secret and Confidential Formerly Restricted Data; Secret and Confidential National Security Information provided such information is not designated classified cryptographic information (CRYPTO), other classified communications security (COMSEC) information, or Sensitive Compartmented Information; and special nuclear material in quantities described in the DOE 5632 Order series, as required in the performance of official duties. When L access authorizations or clearances are granted to employees of access permit holders, they are identified as L(X) access authorization or clearances and permit access only to the type of Confidential Restricted Data specified in the access permit. Additionally, the Manager of the Operations Office may grant an "L" access authorization or clearance to craft or manual workers, community management and service personnel, nurses, medical technicians, cafeteria workers, health and safety workers, purchasing and accounting groups, and others who are employed in classified construction or operation areas, provided the work of such individuals does not afford them:
- (1) more than visual access to buildings and equipment classified no higher than Secret Restricted Data; or
 - (2) access to information classified higher than Confidential Restricted Data concerning plant operating characteristics, process data, weapons, or weapons components.
- (d) **Secret access authorizations or clearances** Based on National Agency Checks and Inquiries with Credit for Federal employees, or National Agency Checks with Credit for non-Federal employees, conducted by OPM. Secret clearances permit an individual access, on a need-to-know basis, to Secret and Confidential National Security Information and Formerly Restricted Data as required in the performance of duties.

(5631.2B)

Accident Response Capabilities Coordinating Committee

Access control

The process of limiting access to information or to resources of an ADP System to only authorized users. (5637.1)

Access control measures

Hardware and software features, physical controls, operating procedures, management procedures, and various combinations of these designed to detect or prevent unauthorized access to an ADP System and to enforce access control. (5637.1)

Access permit

A permit, issued by the DOE, authorizing access by the named permittee to Restricted Data applicable to the civilian uses of atomic energy. (5634.1A)

Access permittee

- 1: An individual or organization which has been issued a permit by the DOE providing access to restricted data applicable to civil uses of atomic energy in accordance with the terms and conditions stated on the permit and in accordance with applicable security regulations. (5631.1A) (5631.4);
- 2: Designates an individual or organization who has been issued a permit by the Department, providing access to Restricted Data applicable to civilian uses of atomic energy in accordance with the terms and conditions stated on the permit and in accordance with applicable security regulations. (5631.2B)

Accident

An unforeseen or abnormal event. (5500.1A, Change 1)

Accidental, inadvertent actions

Occurrences wherein the high explosive, the nuclear system, or the arming and firing system operates in response to a malfunction, an act of God, or to human error. (5610.3)

Accident (explosive)

An incident or occurrence that results in an uncontrolled chemical reaction involving explosives. (6430.1A)

Accident Response Capabilities Coordinating Committee

An advisory body that assists and advises the Manager of the Albuquerque Operations Office in matters relating to the overall management and coordination of DOE's nuclear weapons accident response resources. (5500.1A, Change 1)

Accident Response Group (ARG)

Accident Response Group (ARG)

1: A group of technical and scientific experts composed of DOE and DOE-contractor personnel assigned responsibility for providing DOE assistance to peacetime accidents and significant incidents involving nuclear weapons anywhere in the world. (5500.1A, Change 1) (5530.1); 2: A team of scientists, engineers, and technicians that is trained, organized, and equipped to respond to a nuclear weapon accident/incident. (5500.4)

Accountability

1: The property which enables activities on an ADP System to be traced to individuals who can then be held responsible for their activities. (5637.1); 2: The part of the safeguards and security program which encompasses the measurement and inventory verification systems and records and reports to account for nuclear materials. (5634.1A)

Accountability information

A set of records, often referred to as an audit trail, that collectively provide documentary evidence of the processing or other actions related to the security of an ADP System. (5637.1)

Accountability measurements

The quantitative determination of bulk or Special Nuclear Material (SNM) attributes used in nuclear materials accounting. (5633.3, Change 1)

Accountability station

An organizational unit (or individual) designated by a transfer and accountability station to act as Secret document control point secondary to the transfer and accountability station. (5635.1A)

Accountable Officers Accounts

Specific documents prepared by accountable officers and required by the General Accounting Office (GAO) to be maintained for audit. Also known as Site Audit Records. (1324.2A)

Accounting classification

A means of classifying financial transactions and account balances to provide needed information for the financial management of appropriations and related programs and budgets. This term includes, but is not limited to, the appropriation symbol—e.g.; 89X0213, budget and reporting code—e.g., ORO 391 AA 05, and the object classification—e.g., 2520. (2200.4)

Accounting control

The plan of organization and the procedures and records that are concerned with the safeguarding of assets and the reliability of financial records. They are designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization.

Transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements, and to maintain accountability for assets. Access to assets is permitted only in accordance with management's authorization, and the recorded accountability for assets is compared with the existing assets at reasonable intervals. Appropriate action is taken with respect to any differences. (2200.4)

Accounting system

The system(s) for recording, classifying, and summarizing information on the Department's financial position and operations, and reporting data for both internal and external financial decision-making purposes. (2200.12)

Accounts payable

A control account that includes all amounts billed to the Department but not yet paid. Accounts payable also include amounts that the Department owes as required by law, regulation, or agreement and not necessarily represented by invoices. (2200.4)

Accounts receivable

A control account applicable to all claims held against others for the future receipt of money, goods, and services. (2200.4)

Accreditation

1: The process of evaluating a program which, through the use of radiation dosimeters, measures and records dose equivalents received by radiation workers. The accreditation process consists of performance tests of personnel dosimeters and site visits by assessors. (5480.15); 2: A process to formally recognize reactor and non-reactor nuclear facility training programs as meeting established accreditation objectives and criteria. (5480.18);

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Accreditation

Accreditation (continued)

3: Accreditation is the formal declaration by a designated official that an automated information system or network is approved to operate: in a particular security mode; with a prescribed set of technical and nontechnical security safeguards; against a defined threat; in a given operational environment; under a stated operational concept; with stated interconnections to other automatic information systems or networks; and at an acceptable level of risk for which the accrediting official has formally assumed responsibility. The accreditation statement affixes security responsibility with the accrediting official and shows that due care has been taken for security. (5637.1)

Accreditation coordinators

Individuals appointed within the program office and the field organization who are responsible for reviewing accreditation documents and maintaining the communication between DOE and the contractor concerning all accreditation activities associated with the office. (5480.16, Change 2)

Accreditation maintenance report

A report written two years after accreditation or renewal of accreditation which describes changes in the accredited training programs since the last accreditation review. (5480.16)

Accreditation review team

A group of individuals representing the Training Accreditation Program with collective expertise in nuclear facility or reactor operations, nuclear facility training, instructional processes, and training program evaluation. This team reviews the facility's Contractor Self-Evaluation Report, visits the facility, evaluates training, and prepares a report of conclusions and recommendations. (5480.16, Change 2)

Accredited

The status conferred upon DOE and DOE contractor dosimetry programs that have undergone the accreditation process and met or exceeded the applicable criteria of DOE/EH-0026 and DOE/EH-0027. Programs are accredited for a period of two years from the date of notification. (5480.15)

Accrediting Board

An independent group of individuals responsible for making the decision to award or defer accreditation. The Accrediting Board consists of five members with collective expertise in nuclear facility and reactor operations, nuclear and non-nuclear processes, and educational accreditation. (5480.18)

Accrual basis of accounting

A method of accounting in which revenues are recognized in the period earned and costs are recognized in the period incurred, regardless of when payment is received or made. (2200.4)

Accrued benefit

- (a) **Defined benefit plan** Employee's retirement income earned under the contractor's plan as of the date of determination, expressed in the form of an annual benefit commencing at normal retirement age or the actuarial equivalent thereof.
- (b) **Defined contribution plan** The employee's account balance as of the date of determination.

(3830.1)

Accrued cost

Refers to the formal recognition of the incurrence of cost when goods and services are received, produced, consumed, or otherwise applied to operations, programs, or projects, whether or not cash payment has been made. (5100.14)

Accumulated allowance for purchase of annuities

The accumulated allowance necessary to purchase annuities for employees. (2200.4)

Accuracy

1: The degree of agreement of a measurement with an accepted reference or true value. It is expressed as the difference between the two values, the difference as a percentage of the reference or true value, or as a ratio of the measured value and the reference or true value. (5400.XY); 2: Accuracy (as distinguished from precision) is a measure of the agreement between the true value and the measured value. (5633.3, Change 1)

Acquired land

Land obtained from public or private sources, but excludes land withdrawn from public domain. (4300.1B)

Acquisition

Acquisition

Procuring by contract of supplies and services, through purchase or lease, by and for use of the Federal Government. Acquisition begins with the establishment of need and includes the description of requirements, solicitation, and selection processes, contract award, financing, performance, administration, and any technical and management functions directly related to fulfilling the agency's needs by contract. (4540.1B)

Acquisition plan

Documentation supporting the acquisition of a non-major item of ADPE which must be approved prior to release of a solicitation document for an acquisition. (1360.1A)

Activate

- 1: The actuation of a device or devices to a position or positions which would permit the passage of prearming, arming, fuzing, or firing signals. (5610.3);
- 2: The actuation of a design safety feature to a position that would permit the transmission of prearming, arming, or firing signals. (5610.11)

Activities

Comprised of the work events necessary to perform the programmatic or administrative functions of the Department from inception to completion. For example, payroll activity includes the following work events: (a) time and attendance reporting; (b) computation of gross pay, deductions and net pay; (c) preparation of checks; (d) distribution of checks and earnings and leave statements; and (e) preparation of payroll reports. Major activities are identified in the vulnerability assessment process. Detailed activities are identified in the abbreviated internal control review and internal control review processes. (1000.3B)

Actual inventory difference

Represents the algebraic difference between the total inventory difference and the explained inventory difference. (5633.3, Change 1)

Additive costs

All direct and indirect costs that are incurred beyond those that normally would have been incurred had DOE not agreed to perform the work or service. Additive costs are charged to others in all instances, except when a cooperative agreement has been executed that provides for sharing the cost. (2200.4)

Administrative limitation

Adjustment

An entry into the accounting records to reflect an approved, justified, and documented change. (5633.3, Change 1)

Administering Office

The organization responsible for controlling all aspects of a work arrangement. (2200.4)

Administrative charges

Those amounts assessed by DOE to cover the costs of processing and handling delinquent debt due the Government. (2200.2A)

Administrative check

A review to determine that no irregularities appear to exist, no items are obviously missing, and that there is no indication of tampering. (5633.3, Change 1)

Administrative control

Administrative control includes, but is not limited to, the plan of organization and the procedures and records that are concerned with the decision processes leading to management's authorization of transactions. Such authorization is a management function directly associated with the responsibility for achieving the objectives of the organization and is the starting point for establishing accounting control of transactions. (2200.4)

Administrative limitation

1: An upper limit placed on the amount of obligations or expenditures that may be incurred for a specific program, function, activity, or element of expense. This type of restriction is subject to Departmental, rather than statutory, rules and penalties. Funding ceilings can be imposed on DOE by Congress (e.g., Congressional Conference Reports), OMB (e.g., any executive branch directive containing an administrative limitation attached to an apportionment), or internal DOE management (e.g., ceilings on travel). Administrative limitations specified in AFPs may not be exceeded. (5100.12);

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Administrative limitation

Administrative limitation (continued)

2: An upper limit placed on the amount of obligations or expenditures that may be incurred for a specific program, function, activity, or element of expense. Exceeding an administrative limitation is subject to Departmental rather than statutory rules and penalties. Administrative limitations can be imposed on the Department by Congress (e.g., congressional conference reports), the Office of Management and Budget (e.g., any executive branch directive containing an administrative limitation attached to an apportionment), or internal DOE management (e.g., ceilings on travel). Administrative limitations specified in approved funding programs may not be exceeded. Although administrative limitations may not be exceeded, they differ from legal limitations, for violations of administrative limitations are not necessarily violations of law. Violations of administrative limitations are violations of DOE policy. Exceeding an administrative limitation may, however, result in a legal violation at the Department level. (2200.4)

Administrative offset

The withholding of money payable by the United States to, or held by the United States on behalf of an individual, corporation, or other entity to satisfy a debt owed the United States. (2200.4)

Administrative security

The management procedures and constraints, operational procedures, accountability procedures, and supplemental controls established to provide an acceptable level of protection for classified information. (5637.1)

Administrative subdivision of funds

Any subdivision of an allotment that makes funds available in a specified amount for the purpose of incurring obligations or that can be further subdivided to make funds available in a specified amount for the purpose of incurring obligations, subject to limitations contained in the funding documents, statutes, regulations, or other applicable directives. (2200.4)

ADP equipment data system

The DOE version of the system administered by the General Services Administration (GSA). It maintains an inventory of ADP systems costing in excess of \$50,000. (1360.6)

ADP equipment reporting unit number

A four-character code used to identify the automatic data processing unit within the subagency. The full address of the ADP unit and the telephone number for the contact person at the ADP unit are accessed using this number. (1360.6)

ADP facility

One or more rooms, generally contiguous, containing the elements of an ADP System. (5637.1)

ADP services

The computation or manipulation of data by computers in support of administrative, financial, communicative, scientific, and other similar data processing applications. This term includes teleprocessing (including remote batch) and local batch processing. (1360.1A)

ADP support services

Services, except ADPE maintenance services, that are adjunct and essential to ADP activities but do not involve the actual computation or manipulation of data by a computer. This term includes source data entry, computer output microfilming, conversion, training, studies, facilities management of Government-furnished ADP equipment, systems analysis and design, programming, equipment operation, and computer performance evaluation. (1360.1A)

ADP system

An assembly of components of computer hardware, telecommunications, interconnections with other ADP equipment (e.g., networks), and the entire collection of software that is executed on that hardware. Included in this definition are word processors, microprocessors, personal computers, controllers, Automated Office Support Systems (AOSS), memory typewriters, and other stand-alone or special computer systems. (5637.1)

Advance

Payment made in advance for the later delivery of goods, services, or other assets. (2200.4)

Advance funding

Advance funding

Authority provided in an appropriation act to obligate and disburse funds during a fiscal year from the succeeding year's appropriation. The funds so obligated are added to the budget authority for the fiscal year and deducted from the budget authority of the succeeding fiscal year. The appropriation language usually states the date after which the funds of the succeeding year may be obligated. (2200.4)

Adverse action

A personnel action which reduces an employee's basic pay or grade, or which involuntarily separates the employee from the Federal service, or which involuntarily places the employee in a nonpay, nonduty status. Adverse actions may result from disciplinary or nondisciplinary situations. Adverse actions are:

- (a) **Suspension** An action which places an employee, for disciplinary reasons, in a temporary status without duties and pay.
- (b) **Reduction in grade or pay** Actions taken that change an employee from a position at one grade and rate of basic pay to another position at a lower grade and rate of basic pay. (See Attachment 9 for reductions in grade or pay excluded from coverage of this Order.)
- (c) **Furlough** The placing of an employee in a temporary status, without duties and pay because of lack of work or funds or for other nondisciplinary reasons.
- (d) **Removal** The separation of an employee from his or her position in the Department for cause.

(3750.1, Change 3)

Advice of allotment

The document used to officially record allotments. It is issued to a manager for field activities or to the Controller for Headquarters activities. In conjunction with an approved funding program, the Advice of Allotment establishes organizational funding limits, which may not be exceeded. This document is the mechanism by which DOE controls funds to satisfy the requirements of the Anti-Deficiency Act—31 U.S.C. 1517. (2200.4)

Aerial measuring system

An aerial detection system with the capability of measuring extremely low levels of gamma radiation and locating and tracking airborne radiation. The system also has aerial photography and multi-spectral sensing capabilities. (5500.1A, Change 1)

Affiliate

A concern or individual which either directly or indirectly controls or possesses the power to control another, or a third party which controls or has the power to control both. (4220.4)

Affirmative action

Results-oriented and imaginative actions which a contractor, by virtue of its Federal contracts, must take to ensure equal employment opportunity. Where appropriate, it includes goals to correct under utilization of minorities and women and to correct problem areas. It may also include relief for those protected by equal opportunity laws, such as back pay, retroactive seniority, makeup goals and timetables. (3220.2, Change 2)

Affirmative action clauses

Clauses included in federal contracts and subcontracts detailing the affirmative action requirements for disabled veterans, Vietnam era veterans, and handicapped workers. (3220.2, Change 2)

Affirmative action program

A written, results-oriented program, meeting the requirements of applicable regulations of the Office of Federal Contract Compliance Programs. (3220.2, Change 2)

Agency

1: Any executive agency or independent establishment in the executive branch as defined by 5 U.S.C. 105, the U.S. Postal Service, the U.S. Postal Rate Commission, and the military departments as defined by 5 U.S.C. 102. (2200.2A); 2: Each authority of the executive branch of the Government of the United States, whether or not it is within or subject to review by another agency—5 U.S.C. 551(1). (2200.4)

Agency-subagency code**Agency-subagency code**

A four-character code as specified by FIPS PUB 95, which identifies the agency and subagency organizational components. (1360.6)

Aggregate limitation

A loan guarantee commitment ceiling that is subject to a limitation other than an annual limitation. An aggregate limitation stipulates a maximum level of loan guarantee commitments that may be accumulated against the limitation over a number of years. Aggregate limitations do not require apportionment action by OMB and are not subject to violations of section 3679 of the Revised Statutes, as amended. However, a violation of an aggregate limitation constitutes a violation of a legal limitation. For Annual limitations, see Loan guarantee commitment limitation. (2200.4) (2100.4A)

Agreement

A written document developed jointly by the school and a DOE servicing personnel office that outlines the responsibilities of each organization under the Student Volunteer Service Program. (3308.1)

Agreement for cooperation

Any agreement with another national or regional defense organization authorized or permitted by the Atomic Energy Act of 1954, as amended. (5631.4)

Agreement state

Any State of the U.S. with which NRC, or its predecessor, AEC, has entered into agreement under section 274b of the Atomic Energy Act of 1954, as amended. (5633.4) (5633.5)

Air carrier

A common carrier utilized for transportation of passengers or cargo. (5635.3)

Aircraft

A device that is used or intended to be used for flight in the air, including heavier than air and lighter than air aircraft, airplanes, gliders, helicopters, rigid and nonrigid airships, and balloons. (5480.13)

Aircraft accident

An occurrence associated with the operation of an aircraft which takes place between the time a person boards the aircraft with the intention of flight until such time as all persons have disembarked and in which any person suffers death or serious injury as a result of being in or on the aircraft or anything attached thereto, or in which the aircraft receives substantial damage. (5480.13)

Aircraft incident

Any deviation from the normal, planned, or expected aviation operation, if the deviation has adverse safety, health, or environmental effects or potential effects and is not classified as an accident. (5480.13)

Airport

An area of land or water that is used or intended to be used for the landing and takeoff of aircraft, including its buildings and facilities, if any. (5480.13)

ALARA (As Low As Reasonably Achievable)

1: A phrase and acronym used to describe an approach to radiation exposure control or management whereby the exposures and resulting doses to members of the public are maintained as far below the specified limits as economic, technical, and practical considerations will permit. (5400.XY);
2: A phrase (acronym) used to describe an approach to radiation protection to control or manage exposures (both individual and collective to the work force and the general public) and releases of radioactive material to the environment as low as social, technical, economic, practical, and public policy considerations permit. As used in this Order, ALARA is not a dose limit, but rather it is a process that has as its objective the attainment of dose level below the applicable limits of the order as practicable. (5400.5, Change 1)

Alarm limits

Established values for inventory differences which when exceeded, require immediate action and reporting to the cognizant operations office and the Office of Safeguards and Security—DP-34. For processing, production, and fabrication operations, alarm limits will be established with a 99 percent confidence level. See Control limits. (5633.3, Change 1)

Alarm zone

An alarm zone is a predesigned segment of the perimeter barrier and isolation zone or a specified area which is protected by one or more intrusion detection aids. (5632.1A)

Alcohol abuse disorder

Alcohol abuse disorder

A condition in which a person's intake of alcohol is great enough to damage or to adversely affect physical or mental health, or personal, social, or occupational function, or when alcohol has become a prerequisite to normal functioning. (5480.YY)

Alimony

A periodic payment of funds for the support and maintenance of a spouse or former spouse and, subject to and in accordance with State or local law, includes but is not limited to separate maintenance, alimony pendente lite (an allowance made pending a suit for divorce or separate maintenance, including a reasonable allowance for preparation of the suit as well as for support), maintenance, and spousal support. Alimony also includes attorney fees, interest, and court costs, if they are expressly made recoverable under a decree, order, or judgement issued in accordance with applicable State or Local law by a court of competent jurisdiction. (2200.11)

Aliquot

The fraction of a field sample taken for complete processing through an analytical procedure (a "laboratory sample" of a field sample). (5400.XY)

Allocable cost

A cost is allocable to a particular cost objective (i.e., a specific function, project, process, or organization) if the costs incurred are chargeable or assignable to such cost objectives in accordance with the relative benefits received or other equitable relationships. Subject to the foregoing, a cost is allocable if: (a) it is incurred solely for materials or services sold; (b) it benefits both the customer and the Department in proportions that can be approximated through the use of reasonable methods; or (c) it is necessary to the overall operation of the Department and is deemed to be assignable in part to materials or services sold. (2110.1A)

Allocated costs

An apportionment of the costs from a total cost base which can be identified (directly or indirectly) with a specific service, function, product, or endeavor. (5660.1)

Allocation

The amount of obligational authority transferred from one agency, bureau, or account to another agency, bureau, or account that is set aside in a transfer appropriation account to carry out the purposes of the parent appropriation or fund. For example, allocations are made when one or more agencies share the administration of a program for which appropriations are made to only one of the agencies or to the President. (2200.4)

Allotment

1: Authority delegated by the head or other authorized employee of an agency to agency employees to incur obligations within a specified amount, pursuant to OMB apportionment or reappportionment action or other statutory authority making funds available for obligation. Allotments convey legal limitations, which include funded and unfunded loan guarantee commitment limitations. (2100.4A); 2: Authority delegated by the head or other authorized employee of an agency to agency employees to incur obligations within a specified amount pursuant to an OMB apportionment or reappportionment action or other statutory authority making funds available for obligations. Allotments convey legal limitations and are made on HQ F 2260.2, "Advice of Allotment." (5100.14); 3: Authority delegated by the head or other authorized employee of an agency to agency employees to incur obligations within a specified amount pursuant to Office of Management and budget apportionment or reappportionment action or other statutory authority making funds available for obligations. Allotments reflect legal limitations. See Advice of allotment. (2200.4); 4: An authorization by a delegate agency of the amounts and kinds of controlled materials which may be procured or used for authorized programs during specified periods of time. (5560.1A); 5: A quantity of nuclear material involving projects of a Headquarters program organization assigned to an Operations Office for management control. Allotments are issued for a year in terms of quantities of nuclear materials to be withdrawn from or returned to DOE production supply. Production supply organizations are the Office of Nuclear Materials Production (DP-13), for all non-UF nuclear materials, and Office of Uranium Enrichment (NE-30), for Uranium 6 in UF6 form only. (5660.1)

Allottee

1: The head or other authorized employee of the Department who has been delegated authority to incur obligations pursuant to the terms of an allotment. (5100.12); 2: The recipient of an allotment. (2200.4)

Allowable soil-bearing capacity**Allowable soil-bearing capacity**

The maximum permissible pressure on foundation soils under which the settlements of various footings will not exceed a reasonable value. (6430.1A)

Alternate emergency operations center

An alternate facility to the designated Emergency Operations Center from which the emergency management team can carry out emergency response activities in the event the designated primary Emergency Operations Center cannot be used. (5500.1A, Change 1)

Alternative (DOE)

An administrative relief from DOE regulations that meets and provides equivalent health and safety protection. (1540.2, Change 1)

Ambient

Surrounding environmental conditions. (6430.1A)

American Board of Professional Psychology (ABPP)

The Board certification authority for psychologists. (5480.YY)

American Board of Psychiatry

The Board certification authority for psychiatrists. (5480.YY)

American National Metric Council

A private nonprofit organization that serves as a planning, coordinating, and information center for metric activities in the United States. (5900.2)

Ammunition

As associated with small arms, is the assembled cartridge, including primer, powder, case, and projectile. (5480.16, Change 2)

Anaerobic digestion

Biological stabilization of domestic wastewater sludge by microorganisms that function in the absence of oxygen. (6430.1A)

Analysis of Benefits and Costs (ABC)

A term used to describe an economic analysis technique used to help managers make resource decisions by comparing the relative worth of proposed projects or investments when there is more than one way to satisfy an objective. The ABC process assists in determining the various alternatives for accomplishing an information technology resources initiative and choosing the most cost-effective alternative which meets the organization's missions or goals. ABCs are also commonly referred to as Benefit/Cost, Cost/Benefit, Economic, or Investment Analysis. (1360.8)

Analytical blank

See Blank. (5400.XY)

Analytical detection limit

See Lower Limit of Detection (LLD). (5400.XY)

Analytical limit of discrimination

A concentration above which one can, with relative certainty, ascribe the results from an analysis to concentrations that exist in the environment or system being evaluated. (5400.XY)

Annexation

A proceeding, instituted by a municipality, to include Federal lands in its corporate limits. (4300.1B)

Annual dose equivalent

The dose equivalent received in a year. Annual dose equivalent is expressed in units of rem (or sievert). (5480.11, Change 1)

Annual effective dose equivalent

The effective dose equivalent received in a year. The annual effective dose equivalent is expressed in units of rem (or sievert). (5480.11, Change 1)

Annual Limit on Intake (ALI)

The quantity of a single radionuclide which, if inhaled or ingested in one year, would irradiate a person, represented by reference man—ICRP Publication 23, to the limiting value for control of the workplace, paragraph 9j(2). (5480.11, Change 1)

Annual Work Plan (AWP)

The total collection of maintenance operating documents for a given plant or laboratory. (4330.4)

Annual Work Plan Summary (AWPS)

Annual Work Plan Summary (AWPS)

A statement of resource requirements (funding and full-time equivalents) necessary for proper maintenance of a plant or laboratory during a fiscal year or years. (4330.4)

Annuity funds

Deposits in escrow to provide funds for the purchase of pension benefits for the Federal Employees Retirement System contingent upon completion of a specified number of years of service by each employee. (2200.4)

Anticipated operational occurrence

An abnormal event that is expected to occur once or more during the lifetime of the facility—e.g., small radioactive material spills, small fires. (6430.1A)

Any benefit

Used in determining eligibility for payments in lieu of taxes and the amount to be paid based on special burdens incurred by a State or local government. Any benefit includes all benefits accruing to the State or local government by reason of the Department's activities at the site being considered under a request for payment based on special burdens. The benefits and burdens used to determine payments based on claims of special burdens will be determined on a case-by-case basis. (2100.12)

Apparent fraud

An apparent willful or conscious wrong-doing that adversely affects the Department's interest. It includes, but is not limited to, acts of dishonesty that contribute to loss or injury to the Department. (2300.1A)

Apparent loss

The inability to physically locate or otherwise to account for:

- (a) any identifiable or discrete item (e.g., batch, lot, or piece) containing nuclear material;
- (b) a nuclear material inventory difference in which the book inventory is larger than the physical inventory by an amount in excess of established alarm limit;
- (c) an unexplained significant shipper/receiver difference (page 7, paragraph 80). See page 11–14, paragraph 6a(1).

(5633.3, Change 1)

Apparent violation

The status placed on an overobligation or overexpenditure of an administrative or legal limitation that is pending investigation to determine whether the overobligation or overexpenditure is an actual violation or the result of an accounting error. (2200.4)

Appeal

A request by an individual that an initial agency denial of a request for access, correction, or amendment to a record of that individual be reviewed and reversed. (1800.1A)

Appeal Authority

The Office of Hearings and Appeals. (1700.1, Change 1)

Applicability

This order covers all Departmental activities and materials intended for the news media. Parts of this order may be superseded by the provisions of DOE 5500.4, during operational emergencies. (1200.1)

Applicable interest rate

The interest rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) and published in the Federal Register. This rate is referred to as the renegotiation board interest rate or prompt payment rate and is published semiannually, on or about 1-1 and 7-1. This rate is applicable to interest penalties assessed for late payments. (2200.4)

Applicant

1: One who submits an application, request, or plan required to be approved by a Departmental official or by a primary recipient as a condition to becoming eligible for DOE assistance. (1600.6); 2: Any individual tentatively selected for a sensitive position in DOE which is included in the random testing pool, including an individual who is currently employed by DOE or another Federal agency. An individual becomes an applicant when he or she is selected for a specific position, but employment is delayed pending meeting any required conditions of employment, such as obtaining a requisite security clearance or testing negative on a test for the use of illegal drugs. (3792.3)

Application program

Application program

A computer program, or set of programs, designed to process related records in one area of work and accomplish a specific objective, e.g., payroll, inventory management, personnel administration, budget preparation, and cost accounting. (2100.8)

Applied cost

The value (purchase price) of goods and services used, consumed, given away, lost, or destroyed by an agency of the Government within a given period of time, regardless of when ordered, received, or paid for. For operating programs, applied costs represent the value of resources consumed or used. For procurement and manufacturing programs, applied costs represent the value of material received or produced. For capital outlay programs, applied costs for public works equal the value of work put in place. For loan activities, applied costs represent assets acquired (even though no resource has been consumed). In the case of appropriations for programs that are essentially operating in nature, equipment is included in costs when it is put into use. For all programs—when the data are provided in the accounting system—accrued annual leave is included under costs when earned, rather than when taken (even though it may be unfunded at the time), and depreciation costs and other unfunded costs are to be included where appropriate. Generally, applied costs are associated with program outputs so that such costs become the financial measures of resources consumed or applied in accomplishing a specific purpose, such as performing a service, carrying out an activity, or completing a unit of work or a specific project. (2200.4)

Apportionment

1: A distribution made by OMB of amounts available for specified time periods, activities, projects, objects, or combinations thereof. The amounts so apportioned limit the obligations or loan guarantee commitments that may be incurred. (2100.4A); 2: The distribution made to an agency by OMB of amounts available for obligation in a appropriation or fund account. The distribution makes amounts available for specified time periods, programs, activities, projects, objects, or combinations thereof. The amounts apportioned limit the obligations that may be incurred. (5100.11) (5100.14); 3: A distribution by the Office of Management and Budget of amounts available for obligation in appropriation or fund accounts of the executive branch. The distribution makes amounts available on the basis of time periods, programs, activities, projects, objects, or combinations thereof. The apportionment system is intended to achieve an effective and orderly use of funds. (2200.4)

Appraisal

The process of determining the value, and thus the disposition, of records based upon: their administrative and other uses; their evidential, informational, or research value; their arrangement; and their relationship to other records. (1324.2A)

Appropriate appeal authority

The Director of Hearings and Appeals (HG-1) or his or her designee. (1800.1A)

Appropriate general counsel or field counsel

The General Counsel provided for in section 202(b) of the DOE Organization Act or any DOE attorney designated by the General Counsel as having responsibility for counseling on Privacy Act matters. (1800.1A)

Appropriation

1: An act of Congress which permits Federal agencies to incur obligations and to make payments out of the Treasury for specified purposes. An appropriation usually follows enactment of authorizing legislation. An appropriation act is the most common means of providing budget authority. (5100.12) (5100.14); 2: Legal authority provided by an act of Congress that permits Federal agencies to incur obligations and to make payments from the Department of the Treasury for specified purposes. An appropriation usually follows enactment of authorizing legislation. An appropriation act is the most common means of providing budget authority. See Budget authority. Appropriations do not represent cash actually set aside in the Department of the Treasury for purposes specified in the appropriations act; they represent limitations of amounts that agencies may obligate during the time period specified in the appropriations act. There are several types of appropriations that are not counted as budget authority, since they do not provide authority to incur additional obligations.

- (a) **Appropriation to liquidate contract authority** Congressional action to provide funds to pay obligations incurred against contract authority.
- (b) **Appropriation to reduce outstanding debt** Congressional action to provide funds for debt retirement.
- (c) **Appropriation for refund of receipts.**

(2200.4)

Appropriation act

Appropriation act

An act under the jurisdiction of the committees on appropriations that provides funds for federal programs. A supplemental appropriation act is enacted from time to time to provide additional funding. (2200.4)

Appropriation (or fund) account

1: An account established in the Treasury to record amounts available to the Department for obligation and outlay. (5100.12); 2: An account established in the Department of the Treasury to record amounts available for obligation and outlay. These accounts include not only those to which money is directly appropriated but also those to which revenues are available for use with or without current congressional appropriation action, such as revolving funds and trust funds. In the account number, the first two positions provide agency identification (89). The third or the third and fourth positions indicate the duration of availability of funds, and the last four positions are the account description.

- (a) **Annual account** An account available for incurring obligations only during a specified fiscal year (e.g., for the year 19__, 8910216).
- (b) **Multiple-year account** An account available for incurring obligations for a definite period greater than 1 fiscal year (e.g., for the years 10__-__, 899/10218).
- (c) **No-year account** An account available for incurring obligations for an indefinite period, usually until the objectives have been accomplished (e.g., 89X0224).
- (d) **Unexpired account** An account in which authority to incur obligations has not ceased to be available.
- (e) **Expired account** An account in which authority to incur obligations has ceased to be available but from which outlays may be made to pay obligations previously incurred, as well as a valid adjustment thereto. This includes successor accounts (or lapsed accounts) established pursuant to title 31, sections 1552 through 1556, of the United States Code (M accounts).

(2200.4);

continued on next page

Appropriation (or fund) account (continued)

3: Refers to an account established in the Treasury to record amounts available to the Department for obligation and outlay.

- (a) **One-year accounts** Available for obligation only during a specified fiscal year and expire at the end of that time.
- (b) **Multiple-year accounts** Available for specified period of time in excess of one fiscal year.
- (c) **No-year accounts** Available for obligation for an indefinite period of time, usually until the objectives for which the authority was made available are attained.

(5100.14)

Appropriation limitation

A statutory restriction in an appropriation act that establishes the maximum amount that may be obligated and expended for specified purposes from an appropriation or other funds, such as special or trust funds. (2200.4)

Appropriation refunds

See Refunds. (2200.4)

Appropriation reimbursements.

See Reimbursements. (2200.4)

Appropriation transfer

The withdrawal/permanent movement of budget authority or balances from one appropriation account for credit to another. An appropriation transfer can/ may be effected only when authority to do so is specifically provided in an appropriation or other act. An appropriation transfer requires the execution of an SF 1151, "Nonexpenditure Transfer Authorization," to transfer the funds on Treasury records and the submission of a reapportionment request, SF 132, "Apportionment and Reapportionment Schedule," to OMB. (5100.12)
(5160.1A)

Approved

Compliance with the provisions of this Order and the instructions issued by the authority having jurisdiction. (5480.16, Change 2)

Approved Funding Program (AFP)

Approved Funding Program (AFP)

1: The approved funding program (AFP; formerly referred to as the financial plan) is an internal DOE document issued by the Office of Budget to program managers and operating activities, setting forth the funds available for the program activity in each appropriation and fund account. The AFP specifies pertinent legal and administrative limitations applicable to programs, subprograms, activities, and elements of expense. The AFP provides the authority to program managers to initiate program release documents for their respective programs. Each allottee uses the AFP in conjunction with the associated allotment to establish administrative limitations on the obligational authority available to program managers and organizational elements. (2200.4); 2: Refers to a document issued to program managers and operating activities setting forth the funds available for obligation and expenditure in each appropriation account. It specifies the funding ceilings applicable to each program, subprogram, or activity. Approved funding programs (AFPs) for operating expenses and plant and capital equipment are issued monthly. (5100.14)

Approved missions of a facility

Areas of technical focus that support DOE missions and that have been approved by the cognizant Secretarial Officer for the facility. (4300.2A, Change 2)

Approved storage container

A container that is fabricated from noncombustible material(s); that satisfies container integrity criteria developed from the safety analysis for the particular form(s) of stored material under normal storage conditions, design basis fire and other design basis accident conditions; and that is approved for its intended use by the responsible DOE operating contractor and the responsible DOE field organization. (6430.1A)

Approving official

Secretarial Officers, Heads of Field Elements, and any other person to whom authority has been delegated to approve training assignments. Approvals are subject to authorization in accordance with paragraph b. (3410.1B, Change 1)

Aquifer

A groundwater bearing stratum sufficiently permeable to transmit and yield water in usable quantities. (6430.1A)

Area

A portion of a site. This term is applicable at larger sites that have been segmented into "areas" for facilities planning or other purposes as opposed to a "special area" which is offsite. Example: The "300 Area" at Argonne National Laboratory (ANL) which is a portion of the ANL site devoted to primary research and development. (4300.1B)

Area terms

- (a) **Controlled area** Any area to which access is controlled in order to protect individuals from exposure to radiation and radioactive materials.
- (b) **Radiological area** Any area within a controlled area where an individual can receive a dose equivalent greater than 5 mrem (50 microsieverts) in 1 hour at 30 cm from the radiation source or any surface through which the radiation penetrates, or where airborne radioactive concentrations greater than 1/10 of the derived air concentrations are present (or are likely to be), or where surface contamination levels greater than those specified in Attachment 2 of this Order are present.

(5480.11, Change 1)

Areawide contract

The basic ordering agreement between GSA and the particular utility service supplier to cover the utility service acquisition of Federal Agencies for a period not to exceed 10 years. (4540.1B)

Arithmetic mean

The most commonly used measure of central tendency, commonly called the "average." Mathematically, it is the sum of all the values of a set divided by the number of values in the set:

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n}$$

(5400.XY)

Arming

Arming

- 1: The placing of a nuclear explosive in a configuration such that a single signal will initiate the action required to obtain a nuclear detonation. (5610.3);
- 2: Configuring a nuclear explosive such that a single signal will initiate a nuclear detonation. (5610.11)

Armorer

An individual who by schooling, experience, and assignment is trained to operate, maintain, and repair weapons used by protective force personnel. (5480.16, Change 2)

As Low As Reasonably Achievable (ALARA)

- 1: An approach to radiation protection to control or manage exposures (both individual and collective to the workforce and general public) as low as social, technical, economic, practical, and public policy considerations permit. As used in this Order, ALARA is not a dose limit but a process, which has the objective of dose levels as far below applicable limits of the Order as reasonably achievable. (5480.11, Change 1);
- 2: A phrase (acronym) used to describe an approach to radiation exposure control or management whereby the exposures and resulting doses are maintained as far below the limits specified for the appropriate circumstances as social, economic, technical, and practical considerations permit. (5400.XX) (5400.5, Change 1);
- 3: A philosophy of protection that controls and maintains radiation exposures to individuals and to the workforce and general public as low as technically and economically feasible below the established limits. (5480.3A)

Assessable unit

Designates a program or administrative function or subdivision thereof which is subject to a vulnerability assessment and internal control evaluation. (1000.3B)

Assessment

- 1: An appraisal to evaluate the effectiveness of an activity/operation or to determine the extent of compliance with required procedures and practices; and/or to perform an evaluation of a Material Control and Accounting (MD&A) anomaly or material discrepancy indicator. (5633.3, Change 1);
- 2: An estimation on appraisal, evaluation on analysis. (5632.1A)

Asset

Any item of economic value owned by DOE. The item may be physical (tangible) or a right to ownership (intangible) that is expressed in terms of costs or some other value. (2200.4)

Atmospheric release advisory capability

Asset type code

A three-digit code used in DOE asset accounts to identify the type of property. Real property codes include 800 and 401-699. Personal property codes are 700-799. Related personal property will be included in the appropriate code for the real property to which it relates. (2200.4)

Assignment

Presence of an invited foreign national at a DOE facility, or at a meeting or other interaction in the U.S. sponsored by a DOE facility, for more than 7 calendar days in the absence of an international agreement, or for the number of days specified in an international agreement. Assignments are limited to 2 years duration, subject to extension in accordance with paragraph 9. Assignments are normally for the purpose of participating in the work of the facility, gaining experience, or contributing to projects. Assignees may include employees, guests, or consultants. See definition of "Visit." (1240.2A)

Assurance—multiple projects, (or) single project

Means the written documentation, satisfactory to the Secretary of Energy, required from the prospective performing institution that assures institutional compliance with and implementation of DOE regulations for the protection of human research subjects. (1300.3)

Assurance of compliance

In accordance with the above references, recipients of assistance agree to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or handicap, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the recipient receives DOE assistance. (1600.6)

Assurance testing

A process used to determine that the security features of a system are implemented as designed, and that they are adequate for the proposed environment. This process may include hands-on functional testing, penetration testing and/or verification. (5637.1)

Atmospheric release advisory capability

A computer based system that provides rapid predictions of the transport, diffusion, and deposition of radioactive nuclides or other toxic materials released to the atmosphere and dose projections to people and the environment. (5500.1A, Change 1)

Atomic Energy Act

Atomic Energy Act

The Atomic Energy Act of 1954, as amended. (5650.3, Change 1)

Atomic energy defense programs

Activities, equipment, and facilities of the DOE or other Government agencies utilized or engaged in support of the following:

- (a) development, production, testing, sampling, maintenance, repair, modification, assembly, utilization transportation, or retirement of nuclear weapons, or components of nuclear weapons;
- (b) production, utilization, or transportation of nuclear material for military applications; or
- (c) safeguarding of activities, equipment, or facilities which support the above functions, including the protection of nuclear weapons, components of nuclear weapons, or nuclear material for military applications, any of which may be at a fixed facility or in transit.

(5650.3, Change 1)

Atomic weapon

See Nuclear explosive. (5610.3)

Attractiveness level

A categorization of SNM material types and compositions which reflect the difficulty of processing and handling required to convert material to a nuclear explosive device. See page I-4, Figure 1-2, for examples. (5633.3, Change 1)

Audiovisual production

Any prepackaged arrangement of audiovisual and visual elements (including motion pictures, multimedia presentations, slide shows, film strips, video tapes, sound tapes and recordings, television, and radio public service messages) into a unified presentation designed to communicate information to an audience. (1350.1)

Audit followup assessment

Audit

1: The process of reviewing and evaluating compliance with applicable directives and regulations and/or the examination of records or accounts to check their accuracy. (5633.3, Change 1); 2: Used to describe not only work done by auditors in examining financial statements, but also work done in reviewing: (a) compliance with laws and regulations; (b) economy and efficiency of operations; and (c) effectiveness in achieving program results. (2320.2A) (2300.1A)

Auditable

Established in such a way that the controls necessary for review by management and audit personnel are available and so that a methodical examination and review of data security and integrity can be easily accomplished. (1330.1C)

Audit action officer

The individual designated by the Head of a Departmental Element to ensure and document that all findings are addressed and accepted recommendations are implemented for a specific audit report. For audit recommendations relating to contracts and financial assistance agreements, the audit action officer is normally the contracting officer administering the award. (2300.1A)

Audit action plan

A formal written plan required by OMB Circular A-50 which provides planned corrective action and target dates for completion of corrective actions. The plan is prepared and maintained by the cognizant Departmental Element. (2300.1A)

Audit/appraisal

A planned and documented activity performed in accordance with procedures to determine, by examination and evaluation of objective evidence, the adequacy of and extent to which applicable elements of the program have been developed, documented, and effectively implemented in accordance with specified requirements. Audits can be either internal examinations of programs or activities under an organization's control and within its organizational structure or external examinations of programs or activities or another organization. (5400.XY) (5700.6B, Change 1)

Audit followup assessment

An independent examination of operational audit followup status reports to determine whether the audit recommendations have been adequately addressed. (2300.1A)

Audit followup coordinator

Audit followup coordinator

The individual designated by the Head of a Departmental Element to serve as liaison with the Office of the Controller to coordinate and track audit resolution and followup for the respective Departmental Element. (2300.1A)

Audit followup official

The individual designated by the Secretary to ensure that the Department's audit followup activities result in prompt and proper resolution of audit recommendations. The Assistant Secretary, Management and Administration, has been delegated this responsibility. (2300.1A)

Audit followup review

A systematic, onsite verification and appraisal to determine if corrective action has been implemented on audit recommendations. This differs from an audit followup assessment in that an audit followup review involves an independent onsite verification, whereas an audit followup assessment may be performed based on information prepared by the audited organization. (2300.1A)

Audit followup system

The policies, procedures and controls established and documented by each Departmental Element to ensure timely and proper action on all audit reports with findings and recommendations pertaining to that Departmental Element. (2300.1A)

Audit report

For purposes of this Order, audit reports are categorized into two types: operational and contract. Operational audit reports generally involve actual or potential fraud, waste, error, or procedural deficiencies applicable to Departmental Elements and activities audited or reviewed primarily by GAO or IG. Contractual audit reports cover not only contracts, per se, but financial assistance agreements as well. Contract audit reports will generally concern the allowability of costs claimed by commercial and other organizations doing work for DOE, but could also include fraudulent claims, compliance, economy, and efficiency audits of those organizations when DOE is responsible for assuring that the necessary corrective action is taken. (2300.1A)

Audit report issuance date

The date that an audit report is released. This date begins the period for audit report resolution. In instances where the receipt date by the DOE action office is more than 30 days after the issuance date, the receipt date may be substituted for the issuance date. The reason for using the receipt date in lieu of the release date must be documented. (2300.1A)

Authority to borrow from the Department of the Treasury and the public

Audit report recommendation

The corrective action suggested by the auditor as a result of an audit finding. (2320.2A)

Audit resolution

The point in the audit followup process when the audit action officer makes a determination as to whether management will act on audit findings, recommendations or advice (as opposed to the completion of agreed upon action). For GAO and IG operational audit reports, this normally takes place when the official Departmental response on the audit recommendations is signed. For contract audit reports, audit resolution usually is evidenced by written notification to the auditee initiating appropriate corrective action, a prenegotiation memorandum/plan, or written determination setting forth the basis and rationale for accepting or rejecting the audit report recommendations from the contracting officer. An audit report may be considered resolved despite the right of persons outside the agency to negotiate, appeal, or litigate. (2300.1A)

Augmentation of appropriation

The acceptance of monies, goods, or services that increase an appropriation beyond the limits set by law. (2200.4)

Authenticating official

An official who has received specific authorization to classify information as Top Secret—an authorized Top Secret Classifier. (5635.1A)

Authentication

- 1: Certification that a document contains Top Secret information. (5635.1A);
- 2: The act of verifying the claimed identity of an individual, station or originator. (5637.1)

Authority to borrow from the Department of the Treasury and the public

See Borrowing authority and Authority to spend debt receipts. (2200.4)

Authority to spend debt receipts

Authority to spend debt receipts

Statutory authority that permits a Federal agency to incur obligations and make payments for specified purposes out of borrowed moneys. Authority to spend debt receipts, which is sometimes referred to as borrowing authority, is composed of the following.

- (a) **Public debt authority** Authority derived from the sale of public debt securities of the Federal Government. When an agency has authority to issue its own securities to the Department of the Treasury (and when the Department of the Treasury has authority to purchase such securities), such authority is treated as public debt authority rather than agency debt authority.
- (b) **Agency debt authority** Authority derived from the sale to the public or to other Federal agencies of agency debt securities, including the sale of bonds, assumption of mortgages, and sale of participation certificates in pools of loans.
- (c) **Reappropriation** See Reappropriation.

(2200.4)

Authorization

1: Basic substantive legislation enacted by Congress which sets up or continues the legal operation of a Federal program or agency either indefinitely or for a specific period of time, or sanctions a particular type of obligation or expenditure within a program. (5100.12) (5100.14); 2: The privilege granted to an individual by a designated official to access information based upon the individual's clearance and need-to-know. (5637.1); 3: Furnishing to the Office of the Federal Register a list of organizations and employees who are authorized to receive "Federal Register" publications for official use. (1900.1D); 4: Authorization is the ordering document under an areawide contract issued by the Federal Agency procuring the required utility services. (4540.1B)

Authorizing committee

Authorized classifier

Original classifier One authorized to classify National Security Information by an original determination based on Executive Order 12356, where no specific guidance exists.

Derivative classifier One authorized to classify documents or material as Restricted Data (RD), Formerly Restricted Data (FRD), or NSI only in accordance with existing guidance.

(5635.1A)

Authorized individual

A person who has been granted routine access to specific UCNI under 10 CFR 1017.16(a). (5650.3, Change 1)

Authorized program identifications

- (a) E1 - Atomic energy construction and alteration for the account of DOE.
- (b) E2 - DOE atomic energy operations, including maintenance, repair, and operating supplies.
- (c) E3 - Expansion of privately owned facilities exclusively or primarily for DOE atomic energy program purposes.
- (d) F1 - Energy exploration, production, refining, and transportation.
- (e) F2 - Conservation of energy supplies.
- (f) F3 - Construction and maintenance of energy facilities.

(5560.1A)

Authorized weapons

Weapons authorized by the Department and issued by the responsible contractor or Departmental element to be used by protective force personnel in the performance of their duties. (5480.16, Change 2)

Authorizing committee

A standing committee of the House of Representatives or the Senate with jurisdiction over the subject matter of laws, or parts of laws, that set up or continue the operations of Federal programs, agencies, or particular types of obligations within programs. (2200.4)

Authorizing legislation

Authorizing legislation

Basic substantive legislation enacted by Congress that sets up or continues the legal operations of a Federal program or agency either indefinitely or for a specific period of time or that sanctions a particular type of obligation or expenditure within a program. Such legislation is normally a prerequisite to subsequent appropriations or other kinds of budget authority to be contained in appropriation acts. It may limit the amount of budget authority to be provided subsequently, or it may authorize the appropriation of "such sums as may be necessary." (2200.4)

Authorizing Official

1: The Deputy Director of Administration for Headquarters employees and Heads of Field Organizations with delegated personnel authority or their designated representatives authorized to issue identification cards. (3791.2A); 2: An individual authorized in writing to sign procurement requests or similar documents and determine the fund citations or accounting classifications that accompany each authorization. Authorization includes responsibility for ensuring that the funds are used for the purpose intended in the appropriation act. (2200.4); 3: Heads of Field Elements, the Director of Personnel and Career Development for all Headquarters Elements (except the Office of the Inspector General (IG-1), Executive Director (IG-10), and any person to whom they have delegated their authority to authorize training assignments upon assurance that the contemplated expenses are necessary, funds are available, and that related legal and administrative requirements are met. (3410.1B, Change 1)

Authorizing or denying official

The term refers to any DOE officer or employee having custody of or responsibility for records requested under 5 U.S.C. 552. In DOE headquarters, such an officer or employee will be a Secretarial Officer, an official who reports directly to a Secretarial Officer, or an individual to whom a Secretarial Officer has delegated such authority without power of further redelegation. In the field, such officers or employees will be heads of the field organizations identified in Attachment 1, heads of major field offices that have organizational responsibilities in the identified field locations (i.e., District Managers and Deputy District Managers of the Office of Enforcement; District Directors of the Office of Special Counsel; and Energy Data Field Office Directors of the Energy Information Administration), or individuals to whom the field organization heads have delegated such authority without power of further redelegation. (1700.1, Change 1)

Automated data processing equipment

Automated data processing equipment

Includes:

- (a) mainframe, mini-, micro-, digital, analog, and hybrid computers;
- (b) auxiliary or accessorial equipment, such as plotters, tape cleaners, tape testers, data conversion equipment, source data automation recording equipment (optical character recognition devices, computer input/output microfilm, and other data acquisition devices), and computer performance evaluation equipment, either cable or modem connected, wire connected, or stand alone, and whether selected or acquired with a computer or separately;
- (c) punched card accounting machines that can be used independently or in conjunction with computers;
- (d) devices used to control and transfer data or instructions to and from a central processing unit (CPU), including data transmission terminals, batch terminals, display terminals, modems, sensors, multiplexors, and concentrators;
- (e) storage devices that are designed to be cable connected for use on-line in which data can be inserted, retained, and retrieved for later use;
- (f) general purpose mini- or microcomputers used as control mechanisms where computer technology is essential in controlling, monitoring, measuring, and directing processes, devices, instruments, or other equipment; and
- (g) equipment used in office automation applications that is designed to be controlled by a general purpose data processing language primarily applied through the internal execution of a series of instructions, not limited to specific key stroke functions, and designed for a variety of applications.

(1360.6)

Automated Information

Automated information

Refers to all recorded information regardless of its media form (e.g., audible tone; paper; magnetic core, tape, or disk; microform; electronic signal; and visual/screen displays) that is processed by or stored for the purpose of being processed by a computer system. The terms "automated information," "automated data," "information," and "data" are considered synonymous and used interchangeably in this Order. (1360.2A)

Automated Office Support Systems (AOSS)

Includes: stand-alone microprocessors; word processors; memory typewriters; and terminals connected to mainframes. (5637.1)

Automated surveillance systems

A logically connected set of mechanized and/or electronic components that may be substituted for direct human surveillance. (5633.3, Change 1)

Automatic Data Processing (ADP)

Data processing performed by a system of electronic or electrical machines including input, processing, and output operations. (5635.1A)

Automatic data processing center

One or more rooms or building containing the main elements of an ADP system. (5635.1A)

Automatic Data Processing Equipment (ADPE)

All general purpose, commercially available and/or mass-produced ADP components and the hardware systems created from them regardless of use, size capacity, or price that are designed to be applied to the solution or processing of problems or applications except for specific equipment exempted by DOE 1360.1. (1370.2)

Automatic Data Processing (ADP) records

See Machine-readable records. (1324.2A)

Automatic data processing system

A system comprised of procedures, processes, methods, personnel, and ASP equipment to perform a series of data processing operations either manually or automatically. (5635.1A)

Automatic rifle

A firearm that employs either gas pressure or recoil force and mechanical spring action in ejecting the empty cartridge case after the first shot, loading the next cartridge from the magazine, firing and ejecting that cartridge, and repeating the above cycle as long as pressure on the trigger is maintained or until the ammunition is exhausted. (5480.16, Change 2)

Auxiliary air unit

A factory-fabricated option or addition to a fume hood that introduces some portion of the make-up air directly at the hood with features that do not minimize the performance of the hood nor create operator discomfort. (6430.1A)

Average

See Arithmetic mean. (5400.XY)

Aviation operations

Any operations of aircraft or airports, or the provision of any aviation support services thereto. (5480.13)

Awarding office

Organization which makes procurement and financial assistance awards. (1331.1C)

DOE ORDER DEFINITIONS

B

Backlog of Maintenance and Repair (BMAR)

A statement of the amount of unfunded maintenance and repair at any given time during the fiscal year. (4330.4)

Baggage

Government property and personal property of the traveler necessary for the purposes of the official travel. (1500.2A)

Balances

Balances may be classified as follows.

- (a) **Obligated balance** The amount of unpaid obligations applicable to an account less the amount collectible as repayments to the appropriation or fund. The obligated balance represents obligations incurred (as determined under 31 U.S.C. 1501) for which outlays have not yet been made (including undelivered orders), plus amounts received but not yet earned, less (1) collectible reimbursements receivable, (2) collectible refunds receivable, (3) unfilled orders on hand from within the Government that constitute valid obligations of the ordering account and for which reimbursements will be credited to the account being reported, and (4) unfilled orders from outside the Government for which an advance payment has been received and credited to the account being reported.
- (b) **Unexpended balance** The amount of appropriations or other funds or authority remaining after deducting outlays. This balance includes cash with the Department of the Treasury (and on hand and in banks, when included in Department of the Treasury reports), investments in U.S. Government securities, and unfunded contract authority. The unexpended balance of an account is the sum of obligated and unobligated balances.

continued on next page

Balances

Balances (continued)

- (c) **Unobligated balance** The differences between the obligated balance and the unexpended balance, which is the same as the amount remaining after deducting the cumulative obligations from the amount apportioned and therefore available for obligation during that period.

(2200.4)

Ballast (railroad)

Crushed stone used in a railroad bed to support the ties, hold the track in line, and help drainage. (6430.1A)

Base course

The first layer of underlying material installed prior to the placement of a roadway pavement wearing surface. (6430.1A)

Base table

Describes a document that displays budgetary resources available for obligation by the Department at a level of detail consistent with congressional requirements. It is the controlling document that provides the basis for the DOE allotment and approved funding program system. (5100.14)

Base technology

All technology underlying the design, development, and testing of nuclear materials packaging systems and operations. Base technology elements include: generic design concepts and components with potential for future systems applications; maintenance and benchmarking of test facilities; activities related to increased understanding of materials and their applications; authorized package contents characterization; risk and accident analysis methods; environmental impact analysis methods; standards development; technical investigations underlying regulations, development, and application of computer codes for design and system analysis; modeling; development and application of data bases; and supporting research in the physical, chemical, mathematical, and engineer sciences, which is fundamental to radioactive materials transportation packaging systems development. (1540.3)

Best Available Technology (BAT)

Batch

A particular portion or lot of nuclear material that is handled as a unit for accounting purposes and for which the composition and quantity are defined by a single set of specifications for measurements. The material may be in bulk form or contained in a number of separate items. (5633.3, Change 1)

Bearing capacity

A loading intensity that the bearing materials can sustain without such deformation as would result in settlement damaging to the structure. (6430.1A)

Beginning inventory

The quantity of nuclear materials on hand at the beginning of an accounting period. (5633.3, Change 1)

Below regulatory concern

A definable amount of low-level waste that can be deregulated with minimal risk to the public. (5820.2A)

Bench mark

A survey control monument installed to provide vertical control for construction purposes. (6430.1A)

Bentonite clay

A particular type of colloidal clay that swells when wet and forms a gel membrane. (6430.1A)

Best Available Technology (BAT)

1: The best available technology that is economically achievable. This term is used only in the context of liquid waste treatment processing. BAT takes into account such factors as the age of equipment being used and facilities involved, the process used, the engineering aspects of the application of various types of control techniques, process changes, safety considerations, the cost of achieving effluent reduction, and non-water-quality environmental impact. (6430.1A) (5400.XX); 2: The best technology available for liquid waste treatment processing, taking into account factors such as the age of equipment being used and of facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving effluent reduction, and non-water quality environmental impact and public policy considerations. (5400.XY);

continued on next page

Best Available Technology (BAT)

Best Available Technology (BAT) (continued)

3: Means the preferred technology for treating a particular process liquid waste, selected from among others after taking into account factors related to technology, economics, public policy, and other parameters. As used in this Order, BAT is not a specific level of treatment, but the conclusion of a selection process that includes several treatment alternatives. (5400.5, Change 1)

Bias

1: A systematic (consistent) error in test results. (5400.XY); 2: The deviation of the expected value of a random variable from the corresponding correct or assigned value. (5633.3, Change 1)

Bills/vouchers

See Invoices. (2200.4)

Bird strike

Airspace conflict between aircraft flight patterns and birds or waterfowl. (6430.1A)

Blank

A sample of the carrying agent (gas, liquid, or solid) normally used to selectively measure a material of interest that is subjected to the usual analytical procedures process to establish a baseline or background value. This value is then used to adjust or correct the routine analytical results. (5400.XY)

Blank ammunition

A firearm that employs either gas pressure or recoil force and mechanical spring action in ejecting the empty cartridge case after the first shot, loading the next cartridge from the magazine, firing and ejecting that cartridge, and repeating the above cycle as long as the pressure on the trigger is maintained or until the ammunition is exhausted. (5480.16, Change 2)

Blank Fire Adapter (BFA)

A mechanical device attached to a firearm for the purpose of adapting it for use with blank ammunition. (5480.16, Change 2)

Bond

Designates an agreement under which a person or corporation (e.g., an insurance company) becomes surety to pay, within stated limits, for financial loss caused to another by the act or default of a third person or by some contingency over which the principal may have no control. (3890.1)

Bound documents

Book inventory

The quantity of nuclear material present at a given time as reflected by accounting records. (5633.3, Change 1)

Book message

A message forwarded by teletype, telegraph, or other electrical means to two or more addresses, each of whom will receive the message without the list of other addresses. (5635.1A)

Borings

Boreholes drilled to collect soil samples as part of subsurface investigations conducted for the purpose of structural foundation design. (6430.1A)

Borrower

An inclusive term for all agencies, governments, other organizations, and individuals receiving financial assistance in the form of a loan from, or a loan guarantee by DOE. (1332.1A)

Borrowing authority

Statutory authority (substantive or appropriation) that permits a Federal agency to incur obligations and to make payments for specified purposes out of borrowed moneys. Section 401 of the Congressional Budget Act of 1974 limits new borrowing authority (except for certain instances) to such an extent or to such amounts as are provided in appropriation acts. Borrowing authority, also called Authority to borrow from the Department of the Treasury and the public, may be one or both of the following.

- (a) **Authority to borrow from the treasury** The legislative authority to borrow funds from the Department of the Treasury that are realized from the sale of public debt securities.
- (b) **Authority to borrow from the public** The legislative authority to sell Agency debt securities.

(2200.4)

Bound documents

Documents whose pages are permanently fastened together in a manner by which no one or more pages may be removed without leaving evidence that it was done. This excludes methods such as brads, spiral binders, or similar commercial fasteners commonly used. (5635.1A)

Budget activity

Budget activity

Categories included in the budget appendix for each appropriation and fund account that identify programs under the appropriation or fund for which the budget estimate (or request) is being made. (2200.4)

Budget amendment

A formal request submitted to Congress by the President, after the formal budget transmittal but before completion of appropriation action by Congress, that revises previous requests, such as the amount of budget authority. (2200.4)

Budget and reporting classifications

1: Describe the coding structure that parallels Departmental activities and programs. This structure is used for the execution of the budget; the reporting of actual obligation, costs, and revenues; and the controlling and measuring of actual versus budgeted performance. (5100.14); 2: Classifications that parallel DOE activities and are prescribed for the formulation of budgets; for the reporting of obligations, costs, and revenues; and for the control and measurement of actual performance versus budget performance. (2200.4)

Budget authority

1: The authority provided by law to enter into obligations that will result in immediate or future outlays of Government funds. The basic forms of budget authority are appropriations, contract authority, and borrowing authority. Authority may be classified by the period of availability (one-year, multiple-year, no-year), by the timing of congressional action (current or permanent), or by the manner of determining the amount (definite or indefinite). (5100.14); 2: Authority provided by law to enter into obligations that will result in immediate or future outlays involving Government funds, except for authority to assure or guarantee the repayment of indebtedness incurred by another person or government. The basic forms of budget authority are appropriations, contract authority, and borrowing authority. Budget authority may be classified by the following.

(a) Period of availability

- (1) One-year annual authority/accounts** Budget authority that is/are available for obligation only during a specified fiscal year and that expires at the end of that time. (2200.4) (5100.14)

continued on next page

Budget authority

(a) Period of availability (continued)

- (2) **Multiple-year authority/accounts** Budget authority that is/
are available for a specified period of time in excess of 1
fiscal year. (2200.4) (5100.14)
- (3) **No-year authority/accounts** Budget authority that
remains/are available for obligation for an indefinite period
of time, usually until the objectives for which the authority
was made available are attained, or until the funds are fully
expended. (2200.4) (5100.14)

(b) Timing/time of congressional action

- (1) **Current authority** Refers to the budget authority enacted
by Congress in or immediately preceding the fiscal year in
which it becomes available. (2200.4) (5100.14)
- (2) **Permanent authority** 1: The budget authority that
becomes available as the result of previously enacted
legislation (substantive legislation or prior appropriation act)
and that does not require current action by the Congress.
Authority created by such legislation is considered to be
"current" in the first year in which it is provided and
"permanent" in succeeding years. (5100.14); 2: ... It is
possible to distinguish between "fully permanent" authority
(such as interest on the public debt), where no subsequent
action is required, and "conditionally permanent" authority
(such as general revenue sharing), where authority expires
after a set period of time unless it is reenacted. (2200.4)

(c) Determination of amount

- (1) **Definite authority** Describes the authority that is stated as
a specific sum at the time that the authority is granted. This
includes authority stated as "not to exceed" a specified
amount. (5100.14) (2200.4)

continued on next page

Budget authority

(c) Determination of amount (continued)

- (2) **Indefinite authority** 1: The authority for which the amount is not stated, but is to be determined by subsequent circumstances, such as an appropriation of all or part of the receipts from a certain source. (5100.14); 2: The budget authority for which a specific sum is not stated but is to be determined by the other factors, such as the receipts from a certain source or obligations incurred. (2200.4)

(d) Balances of budget authority

- (1) **Obligated balance** Includes the amount of obligations already incurred for which payments may or may not have been made. (5100.14)
- (2) **Unobligated balance** Designates the portion of budget authority that has not yet been obligated. In one-year accounts, the unobligated balance expires (i.e., ceases to be available for obligation) at the end of the fiscal year. In multiple-year accounts, the unobligated balance may be carried forward to remain available for obligation for the period specified. In no-year accounts, the unobligated balance is carried forward indefinitely until specifically rescinded by law or until the purposes for which it was appropriated have been accomplished. (5100.14)
- (3) **Unexpended balance** The amount of budget authority unspent and still available for outlays in the future. (5100.14)

Budget officer

Management official responsible for the budget operations at Headquarters or at a field element. The responsibility for fund control may rest with the individual at some field elements. (2200.4)

Budgetary reserves

Budget outlays

Include the dollar amounts of checks issued, letter-of-credit withdrawals, or other payments made (including advances to others), net of refunds and reimbursements. The total budget outlay consists of the sum of the outlays from appropriations and funds, less offsetting receipts. The terms "expenditure" and "net disbursement" are frequently used interchangeably with the term "outlay." (5100.14)

Budget receipts

Amounts received by the Federal Government from the public that arise from the following sources (excluded from budget receipts) are offsetting receipts, which are counted as deductions from budget authority and outlays rather than as budget receipts; see Offsetting receipts (collections).

- (a) The exercise of governmental or sovereign power, consisting primarily of tax revenues, but also including receipts from premiums of compulsory social insurance programs, court fines, certain license fees, and the like.
- (b) Premiums from voluntary participants in Federal social insurance programs, such as deposits by States for unemployment insurance and for social security for their employees, that are closely related to compulsory social insurance programs.
- (c) Gifts and contributions.

(2200.4)

Budgetary reserves

Portions of budget authority set aside under authority of the Anti-Deficiency Act—31 U.S.C. 1517(a), as amended by the Impoundment Control Act of 1974, for contingencies or to effect savings whenever savings are made possible by or through changes in requirements or greater efficiency of operations. Section 1002 of the Impoundment Control Act of 1974 restricts the establishment of budgetary reserves and requires that all reserves be reported to Congress. (2200.4)

Budgetary resources

Budgetary resources

In the case of reimbursable work, budgetary resources available for obligation are:

- (a) orders from other Federal Government accounts that represent valid obligations of the ordering account;
- (b) orders from a non-Federal entity, to the extent that they are accompanied by an advance, to perform reimbursable work.

(2200.4)

Budget system

The system(s) for providing funding level controls for formulating the budget, tracking the decisional process on the budget through internal reviews and Congressional action, and controlling and reporting on the distribution of obligational authority. (2200.12)

Buffer zone

The smallest region beyond the disposal unit that is required as controlled space for monitoring and for taking mitigative measures, as may be required. (5820.2A)

Building

1: An improvement which is suitable for housing people, materials, and/or equipment, or which provides only partial protection from the weather, such as a shed. (4300.1B); 2: A roofed structure which is suitable for housing people, material or equipment. Also included are sheds and other roofed structures that provide partial protection from the weather. (4330.4)

Building acquisitions (by lease or purchase)

New pre-engineered metal buildings, other semipermanent or temporary facilities such as in-plant-fabricated modular/relocatable buildings and trailer units, and other buildings to be acquired. (6430.1A)

Bulk materials

Materials in any physical or chemical form that are not identifiable as discrete items and thus must be accounted for by weight, volume, sampling, and chemical analysis or nondestructive analysis. (5633.3, Change 1)

By-product material

Bullet containment device

See Clearing barrel. (5480.16, Change 2)

By-product material

Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process for producing or utilizing special nuclear material.

- (a) For purposes of determining the applicability of the Resource Conservation and Recovery Act to any radioactive waste, the term "any radioactive material" refers only to the actual radionuclides dispersed or suspended in the waste substance. The nonradioactive hazardous waste component of the waste substance will be subject to regulation under the Resource Conservation and Recovery Act.
- (b) The tailings or waste produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content. Ore bodies depleted by uranium solution extraction operations and which remain underground do not constitute "by-product material."

(2110.1A) (5820.2A)

DOE ORDER DEFINITIONS

C

Cadastral records

Official records that show quantity, ownership, and value of real property or the rights thereto. (4300.1B)

Caisson foundation

A shaft of concrete placed under a building column or wall that extends down to rock or solid substratum (also known as a pier foundation). (6430.1A)

Calibration

The adjustment of the system and the determination of system accuracy using known sources and instrument measurements. Adjustment of flow, temperature, humidity, or pressure gauges and the determination of system accuracy should be conducted using standard operating procedures and sources that are traceable to the National Bureau of Standards (NBS). (5400.XY)

Calibration standard

A standard used to quantify the relationship between the output of a sensor and a property to be measured. Calibration standards should be traceable to "Standard Reference Materials" (SRM), "Certified Reference Materials" (CRM), or a primary standard. (5400.XY)

Candle (or Candela)

An international unit of luminous intensity. One candle is equal to the luminous intensity of 5 square millimeters of platinum at its solidification point (1773°C.). See also Foot-candle. (5632.1A)

Cantilever footing

A footing used to support a wall column near its edge without causing nonuniform soil pressure. (6430.1A)

Capillary water

Soil moisture held as a continuous absorbed film around soil particles and in interstices between the soil particles due to surface attraction. (6430.1A)

Capital costs

Capital costs

Costs allocated or expended to design, construct, equip, and place in operation facilities or other capital items; plant and equipment costs funded from DOE's plant and capital equipment appropriation. (5660.1)

Capitalized property

Items of plant and equipment, including both real and personal property, that are owned by DOE and are recorded in the completed plant accounts because they meet the monetary and service life criteria for capitalization, regardless of the appropriation or fund charged. Group purchases of similar items that each cost less than the minimum monetary criterion but that, when combined, constitute a significant investment in DOE-owned property are handled as capitalized property. Items of a sensitive nature or subject to misappropriation are not capitalized unless they meet the above criteria, but they are controlled through property accountability records or appropriate safekeeping facilities or both. Refer to DOE 2200.6, Financial Accounting, Chapter VI, Plant and Capital Equipment, for the specific criteria for the capitalization of DOE-owned property. (2200.4)

Cargo security

The physical protection against theft, pilferage, burglary, hijacking, sabotage, and vandalism of cargo and vehicles in transit. This term includes "physical protection of cargo" and "transportation safeguards." (1540.1)

Carrier

Any person engaged in the transportation of passengers or property as a common, contract, or private carrier, or freight forwarder, as defined in the Interstate Commerce Act, as amended; or the United States Postal Service; or officers, agents, and employees of such carriers. (1540.1) (5480.3)

Cased explosives

Explosives that are enclosed in a physical protective covering that will retain the explosives securely and will offer significant protection against accidental detonation during approved handling and intraplant transportation operations. (6430.1A)

Case files

A folder or file series containing material relating to a specific action, event, person, place, project, or other subject. Sometimes referred to as a project file or a transaction file. (1324.2A)

Cash advance

See Advance. (2200.4)

Cash basis of accounting

A method of accounting in which revenue is recognized at the time that payment is received and costs are considered incurred at the time that payment is made. (2200.4)

Categories I and II

Quantities of special nuclear material or mixtures thereof which are sufficiently large to be worthy of special procedures for measurement, accountability, and control. Precise definitions of these categories appear in DOE 5633.3, Control and Accountability of Nuclear Materials. (5633.4)

Category

A grouping of information to which an additional restrictive label is applied to signify that personnel are granted access to the information only if they have appropriate authorization—e.g., Restricted Data (RD). (5637.1)

Category I

See page I-4, Figure I-2. (5633.3, Change 1)

Category II

See page I-4, Figure I-2. (5633.3, Change 1)

Category III

See page I-4, Figure I-2. (5633.3, Change 1)

Category IV

See page I-4, Figure I-2. (5633.3, Change 1)

Category I and category II quantities of special nuclear material

See DOE 5632.2A, Physical protection of SNM and vital equipment. (5630.13)

Category A reactor

A DOE designation based on power level (e.g., 20 MW steady state), potential fission product inventory, and experimental capability. Category A reactors are listed in Attachment 1, paragraph 3. All other DOE-owned reactors (excluding reactors assigned to the Deputy Assistant secretary for Naval Reactors, NE-60) are designated Category B. (5480.6)

Cause

Cause

A recognizable offense against the employee—employer relationship. May be reasons that are personal to the employee such as on or off the job misconduct, inefficiency, or physical or mental inability to perform the duties of the position. There may also be impersonal reasons such as an emergency situation necessitating a short furlough or the need to correct a merit promotion error. Some causes have been specified by rules, executive order, or regulation. A cause must also promote the efficiency of the service. (3750.1, Change 3)

Central bank

The official government bank of a foreign partner that provides direct funds transfer to a Federal Reserve Bank. (2200.4)

Centralized Technical Review Office

A corps of specialists in the necessary engineering disciplines reporting to the Headquarters Certifying Official (herein after referred to as the Certifying Official) to perform technical reviews of DOE Safety Analysis Reports for Packaging (SARPs). (1540.2, Change 1)

Central Training Academy (CTA)

Located at Kirtland Air Force Base East, Albuquerque, New Mexico. Program responsibility is to the Director of Safeguards and Security (DP-34). (5480.16, Change 2)

Certificate of Compliance

A DOE or NRC document that provides certification that a specific packaging design for specified quantities and types of radioactive materials meets the applicable regulation standards. (5480.3A)

Certification

- 1: A reasonable assurance (based on a technical evaluation of a system test) and written acknowledgment made by a CPPM, or an individual designated by the CPPM, that a proposed unclassified computer application processing sensitive information meets all applicable Federal and Departmental policies, regulations, and procedures, and that results of a systems test demonstrate installed security safeguards are adequate and functioning properly. (1360.2A);
- 2: The official notification by the institution to DOE in accordance with the requirements of 10 CFR Part 745, that a research project or activity involving human subjects has been reviewed and approved by an Institutional Review Board in accordance with an approved assurance. (1300.3);

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Certification (continued)

3: Formal written assurance that, based on evaluation of security tests, the classified ADP System and its environment meet the security specifications outlined by the approved ADP Security Plan. (5637.1)

Certified Reference Material (CRM)

1: Prepared by gas vendors, in quantities of at least 10 cylinders, for which the average concentration is within 1% of an appropriate "Standard Reference Material" (SRM). Two of the cylinders are selected at random and audited for compliance with applicable specifications. (5400.XY); 2: A reference material, one or more of whose property values are certified by a technically valid procedure accompanied by or traceable to a certificate or other documentation which is issued by a certifying body—International Standard Organization Guide No. 30, 1981. (5633.3, Change 1)

Certified waste

Waste that has been confirmed to comply with disposal site waste acceptance criteria (e.g., the Waste Isolation Pilot Plant-Waste Acceptance Criteria for transuranic waste) under an approved certification program. (5820.2A)

Certifying officer

A designated DOE employee with signature authority from that agency's head to attest that the vouchers submitted for payment are correct in their facts, as recited in the certificates or as otherwise stated on the vouchers, and legal under the appropriation or fund involved. (2200.4)

Certifying official

1: A person designated, such as a finance and accounting officer, to certify funds available for the purposes specified in an allotment and who is responsible for maintaining accurate and complete administrative control of funds records. (2200.4); 2: The designated Headquarters official responsible for administering the DOE program for the design review of DOE packaging and issuance of a certificate of compliance upon approval. (1540.2, Change 1)

Change

Change to the Site Development Plan consists of instructions and pages to be inserted or substituted. For minor work or number changes, the instructions could enumerate the page and line of the plan where pen-and-ink changes are to be made. (4300.1B)

Change in goods and services on order

Change in goods and services on order

Describes an adjustment that represents the bridge between program costs and obligations. Change in goods and services on order represents "undelivered orders" or the value of goods and services for which the funds have been obligated, but the goods and services have not been received. As such, it includes the portion of prepayments and advances made to contractors and other government agencies that represents future deliveries of goods and services. (5100.14)

Charge card

A Citicorp Diners Club charge card to be used by travelers:

- (a) to pay for passenger transportation services;
- (b) to pay commercial facilities for subsistence expenses; and
- (c) to pay other allowable travel and transportation expenses incurred in connection with official travel. The term includes an individual employee charge card only. The term does not include personal credit cards issued to employees based upon their own financial merit by any company which issues charge cards.

(1500.4)

Charges

An accumulation of job-related costs for materials and services sold by the Department. (2110.1A)

Charter operations

The carrying in air commerce of any persons or property for compensation or hire, and the use of special mission aircraft. (5480.13)

Check estimate

A validating estimate. Its development and use is similar to an independent cost estimate, except it is developed by program/project or operations office personnel or their supporting contractor. A check estimate should be developed by someone who had no involvement in the original estimate, but who may be an advocate of the project. (5700.2C)

Check source

A source (e.g., a radioactive source) not necessarily calibrated that is used to confirm the continuing satisfactory operation of an instrument (also termed reference source). (5400.XY)

Child support

A periodic payment of funds for the support and maintenance of a child or children and, subject to and in accordance with State or local law, includes but is not limited to payments to provide for health care, education, recreation, clothing, or other specific needs of such child or children; the term also includes attorney fees, interest, and court costs, if they are expressly made recoverable under a decree, order, or judgment issued in accordance with applicable State or local law by a court of competent jurisdiction. (2200.11)

Civil aircraft

All aircraft other than public aircraft. (5480.13)

Claim reserves

Indicate the insurance company's dollar estimate of claims incurred but not yet paid at the end of an accounting period. (3890.1)

Class A facility

Designates a facility which is:

- (a) judged by Heads of Fields Elements to be engaged in administrative activities considered to be essential to the direction and continuity of the overall program;
- (b) engaged in research and development, manufacture, production, assembling or storage of nuclear weapons, weapon assemblies, or military reactors;
- (c) engaged in major research and development in uranium enrichment or operation of major uranium enrichment facilities;
- (d) involved in research and development, manufacture or production, and assembling of nonnuclear weapon components, assemblies, and parts essential to the weapons or military reactors programs;

continued on next page

Class A facility

Class A facility (continued)

- (e) receiving, handling, and storing Top Secret documents exclusive of keying material for secure communications over an extended period; or
- (f) a possessor of Category I quantities of Special Nuclear Material.

(5632.1A)

Class B facility

Designates a facility which is a:

- (a) departmental contractor or subcontractor facility or Government-owned facility with security interests other than the type categorized for Class A facilities and which handles and stores Secret Weapon Data documents or Secret research and development reports;
- (b) facility, other than the type categorized for Class A facilities, in the uranium enrichment program;
- (c) facility in possession of Category II quantities of SNM;
- (d) Departmental National Laboratory with security interest other than the type categorized for Class A facilities; or
- (e) Emergency Operations Centers. (Unmanned Emergency Operations Centers are considered Class C facilities.)

(5632.1A)

Class C facility

Designates a facility which is a:

- (a) Federal Records Center holding classified security interests of the Department;

continued on next page

Class C facility (continued)

- (b) a Departmental Administrative Office, contractor or subcontractor facility engaged in manufacturing, research and development, administrative or consultant activities, including machine and specialty shops, automatic data processing, printing and photographic work, and design engineering where the security interests are limited in scope;
- (c) facility established for classified bid negotiations or quotations; or
- (d) facility authorized to retain classified matter, other than that noted under Classes A and B above, after completion or termination of contract, subcontract, or other agreement; or
- (e) facility in possession of Category III quantities of SNM.

(5632.1A)

Classification

Classification is a means of identifying information concerning the national defense and foreign relations of the United States that requires protection against unauthorized disclosure. (5635.1A)

Classification category

One of three kinds of classified information: Restricted Data, Formerly Restricted Data, or National Security Information. (5635.1A)

Classification control officer

A person appointed to control and account for classified matter within DOE or DOE contractor or subcontractor organizations or a level of organization. (5635.1A)

Classification level

Any one of the three levels in descending order: Top Secret (TS), Secret (S), and Confidential (C). (5631.4) (5635.1A)

Classification of records

Records which are classified or are controlled under the various programs cited in the references will be identified and protected in accordance with DOE 5632.5, DOE 5634.1A, DOE 5635.1A, and DOE 5635.4. (5500.7B)

Classified computer security program

Classified computer security program

All of the technological safeguards and managerial procedures established and applied to ADP Facilities and ADP systems (including computer hardware, software, and data) in order to ensure the protection of classified information. (5637.1)

Classified control officer

A person appointed to control and account for classified matter within a Department of Energy (DOE) or DOE contractor organization. (5635.3)

Classified data/classified information

Top secret, secret, and confidential information of all categories (RD, FRD, NSI, etc.), including intelligence information, for which the Department is responsible and requires safeguarding in the interest of national security and defense. (5637.1)

Classified document

Any document containing classified information. (5635.1A)

Classified information

1: Restricted Data, Formerly Restricted Data, and National Security Information, and is defined in DOE 5650.2A. (5650.3, Change 1) (5631.4) (5635.1A) (1324.2A) (4300.2A, Change 2); 2: Top Secret, Secret, and Confidential Restricted Data, Formerly Restricted Data, and National Security Information, for which the Department is responsible and which requires safeguarding in the interest of national security and defense. (6430.1A) (5632.1A); 3: Information which requires protection against unauthorized disclosure in the interest of national security and includes Restricted Data (RD), Formerly Restricted Data (FRD), or National Security Information (NSI). (5670.2); 4: Restricted Data, Formerly Restricted Data, or National Security Information, which requires safeguarding in the interest of national security. (5631.2B); 5: Any information requiring protection against unauthorized disclosure in the interests of national defense and security or foreign relations of the United States pursuant to U.S. statute or executive order. The term includes Restricted Data, Formerly Restricted Data, and National Security Information. The importance of each is denoted by the classifications Top Secret, Secret, or Confidential. (5631.1A)

Classified information processing equipment

All electronic or electro-mechanical driven systems or components used to process information which has been classified under provision of Executive Order 12356 or other proper authority. Also referred to as "automated information processing equipment." (5300.2C)

Classified telecommunications facility

Classified interest

1: Classified documents, information, or material including classified special nuclear material possessed by the Department, a contractor of the Department, a Department facility, or any other facility under the Department's jurisdiction. (6430.1A) (5632.1A); 2: Classified information or material possessed by DOE, a DOE contractor, or any other facility under DOE jurisdiction. This may include SNM owned by DOE. (5634.1A)

Classified mailing address

An authorized postal mail address including ZIP code, where procedures for classified mail deliveries have been approved. Normally a classified mailing address will be listed with specific approved mail services, such as "Registered Mail Only." (5635.1A)

Classified materials

Chemical substances, including metals, fabricated or processed items, or machinery and equipment that have been classified in accordance with Classified information requirements. (5631.1A)

Classified matter

1: Any document or material which contains classified information or an item which is classified by virtue of its design or appearance. (5635.3); 2: Classified information, documents, parts components, or other material. (6430.1A) (5632.1A); 3: Documents and/or material containing classified information or which are classified in and of themselves. (5635.1A)

Classified records

Vital records which contain classified or unclassified controlled nuclear information. Such records shall be identified and protected in accordance with DOE 5632.4. (5500.7A)

Classified telecommunications facility

A facility that contains both crypto equipment and input/output equipment for the electronic transmission, receipt, or processing of classified information. The crypto equipment and input/output equipment may either be installed in the same area and share common security measures or be installed in different parts of the same security area connected by a protected distribution system, with each area having its own security measures. (6430.1A) (5632.1A)

Classified visit**Classified visit**

Any visit in which an individual is granted access to classified information or in which he/she visits a classified facility (a facility to which mere entry affords access to classified information) after an official determination has been made by a division director or higher official that he/she needs this access in the performance of his/her official duties. (5631.4)

Clearance document

Documentation supporting the completed results of an acquisition of ADPE which, when requested, must be approved prior to award. (1360.1A)

Clearing

The overwriting of classified information on magnetic media such that the media may be reused. (This does not lower the classification level of the media.) Note: Volatile memory can be cleared by removing power to the unit for a minimum of one minute. (5637.1)

Clearing barrel

A device used to point a weapon at or into during the loading and unloading process that will contain any inadvertently discharged round. (5480.16, Change 2)

Closed audit report

An operational audit report is considered closed when the designated audit action officer has documented that all recommendations have been satisfactorily implemented or properly rejected in accordance with this order. An essential part of closure action is determination of the adequacy of the corrective actions taken by means of conducting audit follow-up assessments and/or reviews. A contract audit report is considered closed when the designated audit action officer has documented that amounts due to, or owed by, the Department have actually been recovered or paid. (2300.1A)

Close reflection by water

Immediate contact by water of sufficient thickness to reflect a maximum number of neutrons. (5480.3)

Closure

- (a) **Operational closure** Those actions that are taken upon completion of operations to prepare the disposal site or disposal unit for custodial care, (e.g., addition of cover, grading, drainage, erosion control).
- (b) **Final site closure** Those actions that are taken as part of a formal decommissioning or remedial action plan, the purpose of which is to achieve long-term stability of the disposal site and to eliminate to the extent practical the need for active maintenance so that only surveillance, monitoring, and minor custodial care are required.

(5820.2A)

Code word

One or more unclassified words, symbols, letters, numbers, or a combination thereof, assigned a special meaning for the safeguarding of classified information. Nicknames, chemical symbols, abbreviations, and short letters are not considered code words. (5635.1A)

Coefficient of variation (relative standard deviation)

A measure of precision calculated as the standard deviation values divided by the average of a set of values. It is usually multiplied by 100 to be expressed as a percentage.

$$CV = RSD = \frac{s}{\bar{x}} \times 100 \text{ for a sample, or}$$

$$CV' = RSD' = \frac{\sigma}{\mu} \times 100 \text{ for a population.}$$

(5400.XY)

COG emergency

An emergency involving a national security threat to the continuity of the federal government. (5500.9)

COG Emergency Management Team

A predesignated national or regional team responsible for ensuring the performance of essential functions of a federal department or agency, and for coordinating response to a COG emergency. (5500.9)

COG program

COG program

An integrated program to ensure that the national leadership will survive, and that the essential functions of the government will be effectively executed during any threat to national security. (5500.9)

Cognizant branch chief

Branch chief who has line management responsibility and accountability for the operation or equipment. (RF 5000.3, Rev. 1)

Cognizant DOE authority

An entity in the DOE field organization unless otherwise stated. (6430.1A)

Cognizant federal agency

The federal agency that own authorizes, regulates, or is otherwise deemed responsible for the radiological activity causing the emergency and that has the authority to take whatever action is necessary to stabilize the accident. (5500.1A, Change 1)

Cognizant federal agency official

For DOE, the senior DOE official with jurisdiction over the facility and activities involved in the accident for which DOE is the cognizant federal agency. (5560.1A)

Cognizant secretarial officer

1: The Departmental official, at the Assistant Secretary level, who is responsible for the assignment of work, the institutional overview of a facility, or both. (4300.2A, Change 2); 2: As used in this Order, the Program Secretarial Officer who is responsible for the institutional overview of the activities of one or more M&O contractors. (5700.7B, Change 2)

Cognizant secretarial officer and R&D laboratories

Attachment 1 identifies the cognizant Secretarial Officers and the DOE R&D laboratories under their purview. (5800.1)

Collections

Any monies received by the government. Depending upon the nature of the transaction, collections may be treated as budget receipts, offsetting receipts, refunds, or credits to a deposit fund. (2200.4)

Commercial price

Collection site

A place where individuals present themselves for the purpose of providing urine specimens to be analyzed. The collection site may be located at a government or contractor facility, but must possess all necessary personnel, materials, equipment, facilities, and supervision to provide for the collection in privacy, security, temporary storage, and transportation of urine specimens to drug testing laboratory. (3792.3)

Collective dose equivalent

1: The sum of the dose equivalents of all individuals in an exposed population. Collective dose equivalent is expressed in units of person-rem (or person-sievert) (5480.11); 2: The sum of the dose equivalents of all individuals in an exposed population within 50 mi. It is expressed in units of person-rem or person-sieverts (1 person-Sv = 100 person-rem). (5400.XY)

Collective effective dose equivalent

1: The sum of the effective dose equivalents of all individuals in an exposed population. Collective effective dose equivalent is expressed in units of person-rem (or person-sievert). (5480.11, Change 1); 2: The sum of the effective dose equivalents of all individuals in an exposed population within 50 mi. It is expressed in units of person-rem or person-sieverts (1 person Sv = 100 person-rem). (5400.XY)

Collectors (control equipment)

Devices designed to remove and collect contaminants from an effluent stream. (5400.XY)

Commercial activity

An activity performed by a Federal executive agency which provides a product or service that could be obtained from a commercial source. (4510.1A, Change 1)

Commercial carrier

A for-hire carrier, common or contract, interstate or intrastate. The term specifically excludes "private" and "public" (government) carriers. (5480.3A)

Commercial price

The price that a willing buyer is currently paying or would pay a willing seller for materials and services in the market. (2110.1A)

Commitment

Commitment

A firm administrative reservation of funds, prior to creation of an obligation. A commitment is based upon a valid request for procurement that authorizes the creation of an obligation without further recourse to the official responsible for assuring the availability of funds. An administrative reservation of funds does not constitute a formal subdivision of funds. Note: This definition concerns commitments in the accounting sense and therefore differs from loan guarantee commitments. (2200.4) (2100.4A)

Committed dose equivalent (H_{50})

1: The calculated dose equivalent projected to be received by a tissue or organ over a 50-year period after an intake of radionuclide into the body. It does not include contributions from external dose. Committed dose equivalent is expressed in units of rem (or sievert). (5480.11, Change 1); 2: The predicted total dose equivalent to a tissue or organ over a 50-year period after a known intake of a radionuclide into the body. It does not include contributions from external dose. Committed dose equivalent is expressed in units of rem (or sievert). (5400.XX)

Committed effective dose equivalent ($H_{E,50}$)

The sum of the committed dose equivalents to various tissues in the body, each multiplied by the appropriate weighing factor. Committed effective dose equivalent is expressed in units of rem (or sievert). (5400.XY)

Communications Security (COMSEC)

1: The protection resulting from all measures designed to deny unauthorized persons information of value that might be derived from the possession and study of telecommunications, or to mislead unauthorized persons in their interpretation of the result of such possessions and study. (5637.1); 2: . . . These measures involve proper application of cryptography, TEMPEST, physical, and transmission security standards. (5300.2C); 3: The protection resulting from the application of cryptosecurity, transmission security, and emission security measures to telecommunications and from the application of physical security measures to communications security information. (5636.3A); 4: The protection resulting from the application of cryptosecurity, transmission security, and emission security, and from the application of physical security measures to COMSEC information. These measures are taken to deny unauthorized persons information of value that might be derived from the possession and study of such telecommunications. (5300.4B)

Compensation for personal services

Includes all remuneration paid currently or accrued, in whatever form and whether paid immediately or deferred, for services rendered by employees of the contractor during the period of contract performance. It also includes, but is not limited to, salaries, wages, directors' and executive committee members' fees, bonuses (including stock bonuses), incentive awards, employee stock options, employee insurance, fringe benefits, contributions to pension, annuity, management-employee incentive compensation plans, and location allowances. (3220.1)

Competency

The ability to perform a task, including whatever knowledge, skills, and attitudes are needed. (5632.1A)

Competitive procurement

A "competitive procurement" means that the government's requirements are set forth in the form of functional requirements, data systems specifications or equipment performance requirements, a combination thereof, or other unrestrictive specifications that allow full and open competition and are devoid of bias toward either a specific product or a specific offer. (1360.1A)

Complaint

An oral or written communication by an employee or representative thereof, alleging that there are conditions in the work environment which are in violation of the DOE-prescribed OSHA standards or which pose safety or health hazards to employees. (5483.1A)

Compliance inspection

A documented visit to and evaluation of a GOCO facility, to include an examination of the equipment, physical plant, methods, operations, procedures, and processes, to assess and assure the contractor's conformance with the DOE-prescribed OSHA standards. (5483.1A)

Compliance review

1: An analysis of a recipient's selected employment practices and/or delivery of services for adherence to provisions of 10 CFR Part 1040. (1600.6);

continued on next page

Compliance review

Compliance review (continued)

2: Refers to a review and examination of records, procedures, and review activities at a site in order to assess the unclassified computer security posture and ensure compliance with this Order. This review is normally conducted by the CPPC at an operations office having cognizance over the site and management responsibilities for implementing this Order. For those sites not reporting to an operations office, this review is normally conducted by the Office of ADP Management. (1360.2A)

Component

Any operational, experimental, or research-related part, subsection, design, or material used in the manufacture or utilization of a nuclear weapon, nuclear explosive device, or nuclear weapon test assembly. (5650.3, Change 1)

Compromise

The disclosure of classified data to persons who are not authorized to receive such data. (5637.1) (5635.1A)

Compromising emanations

1: Unintentional data-related or intelligence bearing signals which, if intercepted and analyzed, disclose the classified information being transmitted, received, handled, or otherwise processed by information processing equipment, systems, or components. (5300.2C);

2: Compromising Emanations (TEMPEST) Unintentional data-related or intelligence-bearing signals, which, if intercepted and analyzed, disclose classified information being transmitted, received, handled, or otherwise processed by any information processing equipment. (5637.1)

Computer-Aided Design/Computer-Aided Engineering (CAD)

Computer assisted technologies that provide drafting, design, and/or engineering analysis capabilities of buildings, facilities, parts, circuits, assemblies, and/or models at standalone or graphics workstations connected to a computer. (1370.2)

Computer-Aided Manufacturing (CAM)

Computer assisted technologies (including materials movement, machining and assembly, inspection of quality or operations performed) utilized in transforming raw materials and purchased components into final products. (1370.2)

Computer records produced by a main frame computer

Computer installation

The physical space which contains one or more computer systems. Computer installations may range from locations for large centralized computer centers to locations for individual stand-alone microcomputers. (1360.2A)

Computer Integrated Manufacturing (CIM)

Cohesive manufacturing process that utilizes computers as the enabling technology to integrate design, engineering, manufacturing, and business processes. (1370.2)

Computer match

The computerized comparison of two or more automated systems of records, at least one of which is a Federal system, to identify individuals common to two or more of the record systems or unique to one of the record systems. (1800.1A)

Computer match checklist

A required comparison to all matching programs of agencies subject to the Privacy Act. (1800.1A)

Computer Output Microfilm (COM)

Microfilm containing data produced by a recorder from computer-generated signals. (1324.4)

Computer protection plan

A document which serves as the single source management summary of information associated with the DOE unclassified computer security program as required on page 8, under paragraph 11d. It serves as a basis for estimating security needs, performing security assessments, performing compliance and management reviews, and facilitating risk management and certification efforts. (1360.2A)

Computer records produced by a main frame computer

Not considered automated office electronic records, for purposes of this Order. For coverage of these records see "Machine Readable Records" (schedule 20) in DOE 1324.2. NOTE: Use schedule 20 for automated office electronic records also, as well as other schedules, as appropriate. (1324.6)

Computer security incident

Computer security incident

1: Occurrence of an event which has or could adversely affect normal computer operations such as an unauthorized access, interruption to computer service or safeguarding controls, or discovery of a vulnerability. (1360.2A); 2: An adverse event associated with an ADP System(s): (a) that is a failure to comply with security regulations or directives; (b) that results in attempted, suspected, or actual compromise of classified information; or (c) that results in the waste, fraud, abuse, loss, or damage of Government property or information. (5637.1)

Computer site

A geographic location where one or more computer installations is managed and operated. (1360.2A)

Computing resources

Includes ADPE, hardware maintenance, and ADP services. (1360.1A)

COMSEC material control system

Provides administrative control of DOE COMSEC material, which, for example includes equipment, keying variables, publications, and modifications to equipment. This control is in the area of receipt, assignment, accountability, equipment improvements, impact of security violations, and disposition of COMSEC material. (5300.3B)

Concealment

Protection from hostile observation. (5632.1A)

Concise note

Supplemental/Additional nuclear materials transaction, material balance, or inventory data supplied to the International Atomic Energy Agency (IAEA), in free text format, by facilities selected under the provisions of the Agreement between the United States of America and the International Atomic Energy Agency (IAEA) for the Application of Safeguards in the United States of America (U.S./IAEA Agreement), and by facilities engaged in the import and/or export of nuclear materials. (5633.5) (5633.4)

Concurrences

Indicate agreement with the concept of the response and how it is written. (1325.1A)

Concurrences with comments

Indicate agreement with the concept of the response but should be revised to avoid an incorrect, unresponsive, or misleading statement. (1325.1A)

Condemnation

A judicial proceeding, initiated by the Government under its right of eminent domain, to take private property for public use. (4300.1B)

Condition

Any as-found state, whether or not resulting from an event, which may have adverse safety, health, quality assurance, security, operational or environmental implications. A condition is more programmatic in nature, for example, an error in analysis or calculation; an anomaly associated with design or performance; or, an item indicating a weakness in the management process are all conditions. (5000.3A)

Confidence coefficient

The chance or probability, usually expressed as a percentage, that a confidence interval includes some defined parameter of a population. The confidence coefficients usually associated with confidence intervals are 90%, 95%, and 99%. For a given sample size, the width of the confidence interval increases as the confidence coefficient increases. (5400.XY)

Confidence interval

A value interval that has a designated probability (the confidence coefficient) of including some defined parameter of the population. (5400.XY)

Confidence limits

The outer boundaries of a confidence interval. (5400.XY)

Confidential

1: The lowest classification level applied to information which unauthorized disclosure could be reasonably expected to cause damage to the national security. (5631.4) (5635.1A); 2: A classification level which is applied to classified matter of which the unauthorized disclosure could be expected to cause damage to the national security. (5632.1A)

Configuration management

1: The process of identifying and defining the aggregation of hardware/software, or any of its discrete portions, controlling the release and change of those items throughout the system life cycle, recording and reporting the status of those items and change requests, and verifying the completeness and correctness of that documentation. (1330); 2: Control of changes made to an ADP System's hardware, software, and documentation (including an inventory of the system elements) throughout the development and operational life of the ADP System. (5637.1)

Confinement area

Confinement area

An area having structures or systems from which releases of hazardous materials are controlled. The primary confinement systems are the process enclosures (glove boxes, conveyors, transfer boxes, other spaces normally containing hazardous materials), which are surrounded by one or more secondary confinement areas (operating area compartments). (6430.1A)

Confinement system

The barrier and its associated systems (including ventilation) between areas containing hazardous materials and the environment or other areas in the facility that are normally expected to have levels of hazardous materials lower than allowable concentration limits. (6430.1A)

Confirmatory measurement

A measurement made to test whether some attribute or characteristic of nuclear material is consistent with the expected response for that material if no significant change has occurred. (5633.3, Change 1)

Confirmed positive test

A finding based on an initial test with a positive result followed by a confirmatory test on the same sample using a different method with a positive result. (3220)

Congressional Base Table

1: A table submitted by the Department to cognizant congressional committees that displays operating expenses, capital equipment, and construction at a level of detail that is consistent with congressional control requirements. This table forms a base against which reprogrammings, restructurings, and appropriation transfers will be determined and reported. (2200.4); 2: A table submitted quarterly to appropriate Congressional committees that displays operating expenses, capital equipment, and construction funding at a level of detail consistent with Congressional control requirements. (5160.1A)

Congressionally authorized appropriations

Funding authority provided by Congress either as a direct appropriation or as authority to obligate revenues. (2200.4)

Connection charge

The payment to the utility supplier by the procuring agency for the installation of facilities which are required to make connections to the nearest point of supply. See paragraph 6m for Terminating liability. (4540.1B)

Consignee

The person designated in the shipping papers to receive the shipment. (1540.1)

Consignor

The person executing the shipping papers, and named as such in the shipping papers. The consignor is in every case a shipper. (1540.1)

Constraints

A boundary, limit, or parameter to which the inspection area will be confined. (5632.1A)

Construction joint

A vertical or horizontal concrete surface where construction can be temporarily interrupted and continued later. (6430.1A)

Construction project planning

All activities that are performed, after the initial identification of a project, for the purposes of developing the project concept, reliable cost estimates, realistic performance schedules, and methods of performance. (6430.1A)

Construction projects

New facility, facility addition, and facility alteration projects where engineering and design are required in their performance. (6430.1A)

Constructive receipt

As differentiated from physical receipt, a constructive receipt occurs when a contractor who is manufacturing or fabricating a tangible item to the Government's specifications has earned a portion of the contract price for work performed. Formal acceptance or actual delivery of the work in progress or the work completed is not the determining factor. (2200.4)

Consultant

A person who serves as an advisor to a Departmental officer as opposed to an officer or Departmental employee who carries out the Department's duties and responsibilities. He or she provides view or opinions on problems or questions posed by the Department of Energy, but neither performs nor supervises the performance of operating functions. A consultant is ordinarily an expert in the field in which he or she advises, but the expertness may be based on broad administrative, professional, or technical experience which enables him or her to furnish advice that is considered valuable by the Department. (3304.1)

Consultant fire protection survey program

Consultant fire protection survey program

The program under which fire protection surveys of principal DOE facilities are conducted for the Office of Operational Safety by fire protection engineers of selected contractors administered by this organization. (5480.7)

Consultants

Private individuals acting on their own behalf who provide expert advisory service of a technical or professional nature on a fee or per diem basis. (3309.2)

Consumer reporting agency

Any individual or organization that, for monetary fees or dues or on a cooperative nonprofit basis, regularly engages in whole or credit information or other information for the purpose of furnishing consumer reports to third parties, and who uses any means or facility of interstate commerce for the purpose of furnishing consumer reports. (2200.4)

Contact-handled transuranic waste

Packaged transuranic waste whose external surface dose rate does not exceed 200 mrem per hour. (5820.2A)

Contain

To hold an adversary within a defined area or facility for the purpose of preventing the escape of the adversary. (5632.1A)

Containment

The receptacle in which principal reliance is placed to retain the radioactive material during transport. (5480.3)

Contamination

The presence of hazardous substances at levels which pose potential health and safety risks to the public, site workers, or occupants, or render some portion of the environment unsuitable for use. (5480.14)

Contiguous United States

The adjoining 48 states, and the District of Columbia, excluding Alaska and Hawaii. (5635.1A)

Continuing resolution

Contingency management

Management of all the actions to be taken before, during, and after a disaster (emergency condition), along with documented, tested procedures which, if followed, will ensure the availability of critical ADP systems and which will facilitate maintaining the continuity of operations in an emergency situation. (5637.1)

Contingency plans

Documents developed in conjunction with computer application owners and maintained at the primary and backup computer installation; they describe procedures and identify personnel necessary to respond to abnormal situations, and ensure that computer application owners can continue to process mission-essential applications in the event that computer support is interrupted (e.g., appropriate automated and/or manual backup processing capabilities). (1360.2A)

Contingent liability

An existing condition, situation, or set of circumstances involving uncertainty as to a possible loss to an agency that will ultimately be resolved when one or more future events occur or fail to occur. Contingent liabilities include such items as guaranteed loans and unresolved claims against the Department. (2200.4)

Continuing access

Authorization, for a period not to exceed one year, for an individual who visits DOE, DOE contractor or subcontractor facilities frequently and requires access to the same type of classified information under the cognizance of the same field organization of headquarters division or office. (5631.4)

Continuing resolution

Legislation enacted by Congress to provide budget authority for specific ongoing activities in cases where the regular fiscal year appropriation for such activities has not been enacted by the beginning of the fiscal year. The continuing resolution usually specifies a maximum rate at which the Agency/ Department may incur obligations, based on the rate of the prior year, the President's budget request, or an appropriation bill passed by either or both Houses of Congress. (5100.11) (5100.14)

Continuing resolution authority

Continuing resolution authority

Legislation enacted by Congress that provides obligation authority for specific ongoing activities when the regular appropriation for such activities has not been enacted by the beginning of the fiscal year. The continuing resolution usually specifies a maximum rate at which the agency may incur obligations. This rate is usually based on the rate of obligations of prior years. It may be based on the President's budget request or other Congressional measures. (2200.4)

Continuity of government emergency management team

A DOE team predesignated to ensure the performance of the DOE essential functions at designated locations and coordinate response to a condition caused by domestic or enemy attack involving a national security threat to the continuity of the Federal Government. (5560.1A)

Continuous monitoring

The real-time measurement of liquid, gaseous, and/or airborne effluents and contaminants using in situ measurement systems. (5400.XY)

Continuous sampling

Includes both noninterrupted sampling and repetitive sequential collection of small samples obtained automatically at intervals short enough to yield a representative sample for the entire sampling period. (5400.XY)

Contract

1: For the purposes of implementing policy on organizational conflicts of interest, any contract, agreement, or other arrangement entered into by the DOE. (4220.4); 2: Any enforceable agreement, including rental and lease agreements and purchase orders, between an agency and a business concern for the acquisition of property or services. Accounting directives, grants and cooperative agreements are not included in this definition. (2200.4); 3: A mutually binding legal relationship obligating the seller to furnish property or nonpersonal services (including construction) and the buyer to pay for them. (1332.1A)

Contract authority

- 1: Describes a form of budget authority under which contracts or other obligations may be entered into prior to an appropriation or in excess of amounts otherwise available in a revolving fund. Contract authority does not provide funds to pay the obligations and thus requires a subsequent appropriation or the use of collections to liquidate the obligations. Appropriations to liquidate contract authority are not classified as budget authority since they are not available for obligation. Section 401 of the Congressional Budget Act of 1974 limits new contract authority, with few exceptions, to the extent or amount provided by appropriation acts. (5100.14); 2: Statutory authority under which contracts or other obligations may be entered into in advance of an appropriation or in excess of amounts otherwise available. Contract authority must be funded by a subsequent appropriation or by the use of collections to liquidate the obligations. (2200.4)

Contracting Officer (CO)

- 1: A DOE official designated by Headquarters to enter into or administer contracts between DOE and contractors, and make contract-related determinations and findings. (5483.1A); 2: Individual with the authority to enter into, administer, and/or terminate procurement and financial assistance awards. (1331.1C); 3: A person authorized to enter into, administer, or terminate contracts, financial assistance awards, and sales contracts and to make related determinations and findings. (1300.3); 4: The person with the authority to enter into, administer, and terminate contracts and make related determinations and findings. (4540.1B); 5: A Departmental official who is authorized to execute and administer contracts under delegated contract authority. (4300.1B)

Contracting officer's representative

A DOE employee designated in writing by the contracting officer to represent the contracting officer for administrative and technical functions regarding the contract between DOE and the contractor. (5483.1A)

Contractor

- 1: For purposes of this Order, includes any DOE prime contractor or subcontractor subject to the contractual provisions of DOE PR-50.704.2(a) or specific negotiated contract provisions indicating DOE's decision to enforce environmental protection, safety, and health protection requirements. (5480.4, Change 1);

continued on next page

Contractor

Contractor (continued)

2: Any business entity doing work for the Department including subcontractors, vendors, consultants, bidders, recipients of financial assistance agreements, and other Federal agencies in the case of interagency acquisition. (5630.13); 3: For the purpose of this Order, any DOE management contractor, prime contractor, or subcontractor subject to DOE Acquisition Regulations (DEAR), Final Rule, 48 CFR Ch. 949 FR 11922 (3-28-84), Section 952.223-71 "Safety and Health for Government Owned and Leased Facilities." (5480.14); 4: Includes any DOE prime contractor or subcontractor subject to the contractual provisions of Title 48 CFT 970.5204-2 or specific negotiated contract provisions indicating DOE's decision to enforce environmental protection, safety, and health protection requirements. (5480.16, Change 2); 5: As used in this Order, any contractor or subcontractor organization or access permittee authorized to hand-carry classified matter for DOE. (5635.3); 6: An agency or person who contracts directly or indirectly to supply goods or services to the DOE. This includes subcontractors of any tier, consultants, agents, grantees, and cooperative agreement participants. (5635.1A); 7: Any person, firm, unincorporated association, joint venture, partnership, corporation, or affiliate thereof, which is a party to a contract with the Department. (4220.4); 8: The Citicorp Diners Club, Incorporated. (1500.4); 9: For purposes of this Order, any DOE prime contractor or subcontractor thereto subject of the contractual provisions of DOE PR 9-50.704-2 (a) or (b). (5483.1A); 10: Any organizational entity or individual bound by a contract with DOE. (1332.1A); 11: Any DOE prime contractor or subcontractor subject to the contractual provisions of 48 CFR 970.5204-2 or other specific negotiated provisions indicating DOE's decision to enforce environmental protection, safety, and health protection requirements. (5480.3A); 12: A DOE integrated contractor, or DOE laboratory. (QC-2); 13: Includes subcontractors, consultants, recipients of financial assistance agreements, and another Federal agency in the case of interagency acquisition per DOE 4300.2A. (5632.1A)

Contractor employee

A person who is employed by a contractor. (5483.1A)

Contractor self-evaluation report

A formal report prepared by the contractor summarizing the comparison of a training program to each accreditation objective and its supporting criteria. (5480.18)

Controlled conditions

Contractors

Management and Operating (M&O) contractors (as described at 48 CFR subpart 17.6 and as designated by the Secretary) and other prime contractors and subcontractors provided that they are performing work, at least in part, onsite at a DOE-owned or -leased facility. (1324.2A)

Contractors/subcontractors

For the purpose of this Order, contractors and subcontractors are those departmental elements performing work for the Department associated with DOE foreign intelligence activities. (5670.2)

Contractual agreement

An inclusive term for all contracts, interagency agreements, loan agreements, and loan guarantee agreements. (1332.1A)

Control chart

A graphic chart with statistical control limits and plotted values (usually in chronological order) of some measured parameter for a series of samples. Use of the charts provides a visual display of the pattern of the data, enabling early detection of time trends and shifts in level. (5400.XY)

Controllability

The ability under existing law to control budget authority or outlays during a given fiscal year. "Relatively uncontrollable" usually refers to spending that cannot be increased or decreased without changes in existing substantive law. The largest part of such spending is the result of open-ended programs and fixed costs, such as social security and veterans' benefits, but it also includes payments due under obligations incurred during prior years. (2200.4)

Controlled copy

A document that is maintained on a current basis by means of a formal transmittal and filing system. (5560.1A) (5500.3, Change 1) (5500.1A, Change 1)

Controlled conditions

Include fully developed and characterized processes, documented and available work instructions, adequate equipment, trained personnel, and any special working environment. (QC-1, Rev. 5)

Controlled form**Controlled form**

A form for which distribution or issue is limited. A controlled form may be a Headquarters or Departmental form. (1322.3C)

Controlled materials

The various shapes and forms of steel, copper, aluminum, and nickel alloys, whether new, remelted, rerolled or redrawn, as specified in Schedule II, and as defined in Schedule III, of the defense priorities and allocations system regulation. (5560.1A)

Controlled Scientific and Technical Information

That STI upon which regulations and/or controls are placed to limit availability, access, and/or dissemination. (1430.3)

Controller

An individual trained in firearms activities who helps to ensure that training exercises are conducted safely and that all participants are following the rules. (5480.16, Change 2)

Control limits

The established values beyond which any variation, in this case inventory difference, is considered to indicate the presence of an assignable cause. Control limits established at the 95 percent confidence level are called warning limits. Those established at the 99 percent confidence level are called alarm limits. (5633.3, Change 1)

Controlling official

An individual who may make a determination that specific Government information is, is not, or is no longer UCNI under the procedures on page 6a, paragraph 7b. (5650.3, Change 1)

Controls

When used with respect to nuclear reactors, means apparatus and mechanisms that, when manipulated, directly affect the reactivity or power level of a reactor or status of an engineered safety feature. (5480.6)

Conus

Refers to both the "continental United States" and "conterminous United States" (the 48 contiguous states and the District of Columbia). (1500.33)

Coordination process

Conversion differential

A cost margin established by OMB Circular A-76 and must be exceeded before converting an in-house commercial activity to contract. A cost margin is added to the cost of contracting on the Cost Comparison Worksheet. This amount gives consideration to the loss of production, the temporary decrease in efficiency and effectiveness, the cost of retained grade and pay, temporary operation of facilities at reduced capacity and other unpredictable risks that result anytime a conversion is made. (4510.1A, Change 1)

Conversion, hard

The process of changing measurement language to nonequivalent metric units necessitating changes in the actual physical size and configuration of the part, product, or process which exceed those permitted by established measurement tolerance. Hard conversion allows for simplification and rationalization of size sequence. (5900.2)

Conversion, soft

The process of changing measurement language from inch-pound measurement units to equivalent metric units within acceptable measurement tolerances without changing the actual physical size or configuration of the part, product, or process. (5900.2)

Conversion to contract

The changeover of an activity from performance by Federal Government personnel to performance under contract. (4510.1A, Change 1)

Conversion to in-house

The changeover of an activity from performance under contract to performance by Federal Government personnel. (4510.1A, Change 1)

Cooper E

The recommended live load in pounds per axle and the uniform trailing load for each track. (6430.1A)

Coordination process

The coordination process is the means by which significant environmental compliance issues will be resolved or disseminated to ensure timely development and consistent application of Departmental environmental policy and guidance. (5400.2A)

Coordinators

Coordinators

Those employees designated by their respective head of the participating organization to administer the Government charge card program. (1500.4)

Copying/duplicating

The production of material by use of automatic copy-processing or copier-duplicating machines employing electrostatic, thermal, and other copying processes. (1340.1A)

Corrective action plan

Identifies major work steps and scheduled completion dates to implement internal control needed improvements. (1000.3B)

Corrective maintenance

Repair and restoration of equipment that has failed or is malfunctioning. (5480.MAINT)

Correspondence file

A collection of documents not possessing the uniform characteristics found in a filing series, arranged by subject and covering various types of transactions. Some of the component segments of a correspondence file may be a filing series, such as a folder of monthly activity reports or a subject file classification consisting of travel vouchers. (1324.2A)

Corroborative tests

The evaluation of an analytical method in which a number of laboratories analyze portions of carefully prepared homogeneous samples. (5400.XY)

Corrosivity

The tendency of a metal to wear away another material by chemical attack. (6430.1A)

Cosponsored work arrangement

An agreement normally entered into when costs for work performed associated with DOE's mission can be determined to be mutually beneficial to both the Department and a specific non-Federal participant. Some benefit must be attributable directly to the participant. Cosponsored work is performed with funding provided by cash advances for the non-Federal portion and congressionally authorized appropriations for DOE's portion. Performance of the work is accomplished according to contracted funding arrangements. (2200.4)

Cosponsors

A third-party participant contributing funds, goods, or services to projects supported by the Department. The cosponsor may also participate in the management of the cosponsored project. (2200.4)

Cost account

The management control point at which actual costs are accumulated and performance determined. A cost account is a natural control point for cost and schedule planning and control since it represents the defined work assigned to one responsible organizational element on one contract work breakdown structure element. (2250.1C)

Cost and schedule control systems criteria

DOE-established characteristics that a contractor's internal management control systems must possess to assure effective planning and control of contract work, costs, and schedules. See Attachment 2. (2250.1C)

Cost-based budgeting

Budgeting in terms of costs to be incurred, i.e., the resources to be consumed in carrying out a program, regardless of when the funds to acquire the resources were obligated or paid. Cost-based budgeting, in addition to reflecting the obligational requirements for the program, presents the cost of what is planned to be accomplished. (Obligation-based budgeting is expressed in terms of obligations to be incurred, regardless of when the resources acquired are to be consumed.) When the financing schedules in the appendix to the President's budget state the "program by activities" in terms of costs, an adjusting entry is required to arrive at total obligations. (2200.4)

Cost comparison

The process of developing a cost estimate of Government performance of a commercial activity and comparing it, in accordance with the requirements in Parts II, III, and IV of the Supplement to OMB Circular A-76 (Revised), to the cost for private sector performance. (4510.1A, Change 1)

Cost estimate

A statement of costs estimated to be incurred in the conduct of an activity such as a program, or the acquisition of a project or system. The estimate can be in the form of proposals by contractors or Government agencies, a response to a program opportunity notice, or a DOE estimate. Attachment 1 contains methods for preparing cost estimates. (5700.2C)

Cost estimate review

Cost estimate review

A review of a previous estimate for completeness, reasonableness, and consistency. The completeness relates to the inclusion of all relevant costs. Reasonableness relates to a balance between discernible optimism and pessimism in the estimate. Consistency relates to the general acceptability of applied ground rules or the employment of the same methods in going from one estimate to another. A review may be accomplished by comparing the estimate to an independent estimate; however, reviewers generally will not have these available. Therefore, cost reviewers generally will use such tools as historical rules of thumb to check unit prices, parametric cost estimating relationships, and sampling. Also, the estimate can be examined for internal logic, and the estimating methods can be examined for appropriateness and consistency. (5700.2C)

Cost estimating system

A computerized network of cost estimating models accessible to all DOE cost estimators. The cost models are added or deleted from the network as their use and effectiveness dictate. (5700.2C)

Counterintelligence

Intelligence activity, with the resultant product, intended to detect, counteract, and/or prevent espionage and other clandestine intelligence activities, sabotage, and international terrorist activities on behalf of foreign powers, organizations, or persons. (5636.3A)

Country control numbers

Eight-character coded identifiers used in nuclear materials documentation and reporting to indicate the country in which the nuclear material was produced, enriched, utilized in a reactor, or has safeguards conditions attached to its use or transfer. (5633.5)

Courier

1: A DOE employee or member of the Armed Forces assigned to and performing duties under the direction and control of DOE who is specifically designated for armed protection in transit of Top Secret or other matter which, in the opinion of the responsible Head of a Departmental Element, requires such protection. Couriers are required to carry credential identification. (5635.3);

continued on next page

Courier (continued)

2: An authorized person charged with the armed protection of designated matter in transit. Courier duties may be performed by a Departmental employee or member of the armed forces who is assigned to, and performing duties under the discretion and control of, the Department. Persons performing courier duties shall possess a "Q" access authorization or an equivalent DOD security clearance, shall be authorized under section 161k of the Atomic Energy Act of 1954, as amended, or other appropriate statutory authority to carry firearms and make arrest without warrant. These do not include the courier duties of the Federal couriers in the transportation safeguards division. (5632.1A)

Cover

- 1: The depth of soil coverage above an underground utility. (6430.1A);
- 2: Protection from hostile fire. (5632.1A)

Crawling

Entering and leaving the zone of detection by lying prone to the ground, perpendicular to the zone of detection, moving at an approximate velocity of 0.1 meter per second while maintaining a low profile. (5632.1A)

Credential

A document which identifies and indicates the intended bearer has the authority to perform specific functions (e.g., authority to carry firearms, authority to arrest). (5632.1A)

Credential insert

The blank (unused) credential form which is used to prepare the identification badge. (5632.1A)

Credible accident

Those accidents with an estimated probability of occurrence $>10^{-6}$ /year. Natural phenomena use separate probability criteria as stated in UCRL-15910. (6430.1A)

Creditor agency

The Federal agency to which a debt is owed. (2200.2A) (2200.4)

Criteria

Criteria

1: Rules or tests against which the quality of performance can be measured. They are most effective when expressed quantitatively. Fundamental criteria are contained in policies and objectives, as well as codes, standards, regulations, and recognized professional practices that DOE and DOE contractors are required to observe. (5482.1B); 2: Gauges/measures used to test or compare a real system against the standard or model, such as door thickness, type of lock, or door material. (5632.1A)

Criteria checklist

A checklist of questions to assist in interpreting the criteria. The checklist provides the basis for criteria use from evaluation of proposals describing a contractor's systems to onsite review of the contractor's operating system. Ref. DOE/MA-0262, "Cost and Schedule Control Systems Criteria for Contract Performance Measurement Checklist Handbook," of February 1987. (2250.1C)

Criteria implementation

The application of the criteria to designated project and contract work followed by contractor implementation of compliant systems and formal contractor demonstration of criteria compliance. DOE formally reviews the contractor's demonstrated compliance and issues a certificate of validation for successful contractor implementation. DOE then conducts ongoing data analysis and surveillance reviews to ensure continued criteria compliance by the contractor. (2250.1C)

Critical area

Those structures and enclosures containing safety class items whose continued integrity is essential to ensure the operability of those safety class items in the event of a DBA. (6430.1A)

Critical assembly

A nuclear explosive. NOTE: This definition is for use by the nuclear explosive assembly facilities. (5610.3)

Critical assembly area

An area which contains complete or partially assembled nuclear explosives. (5610.3)

Critical Nuclear Weapon Design Information (CNWDI)

Critical components

The components of a nuclear explosive which control the prearming, arming, fuzing, firing, or releasing and which, if activated or bypassed, could cause or contribute to a nuclear detonation. (5610.3)

Critical duties

Duties which require a DOE or contractor employee to perform work which affords both technical knowledge of and access to nuclear explosive sufficient to enable the individual to cause a detonation (high explosive or nuclear). (5610.3)

Critical facilities

Facilities such as those for radioactive material handling, processing, or storage and those facilities having high replacement value or vital importance to DOE programs. (6430.1A)

Criticality incident

An accidental, self-sustained atomic chain reaction. (6430.1A)

Critical loss detection elements

Any safeguards indication of an anomalous activity or condition. (5633.3, Change 1)

Critical mass

The smallest mass of fissionable material that will support a self-sustaining chain reaction under specified conditions. (5480.5)

Critical Nuclear Weapon Design Information (CNWDI)

1: A DOD category of weapon data designating Top Secret/Restricted Data or Secret/Restricted Data Revealing the theory of operation or design of the components of a thermo nuclear or implosion-type fission bomb, warhead, demolition munition or test device. Specifically excluded is information concerning arming, fuzing and firing systems; limited life components; and total contained quantities of fissionable, fusionable, and high-explosive materials by type. Among these excluded items are the components which military personnel set, maintain, operate, test, or replace. (5631.4); 2: A Department of Defense (DOD) category of weapon data designating Top Secret/Restricted Data or Secret/ Restricted Data revealing the theory of operation or design of the components of a thermonuclear or fission bomb, warhead, demolition munition, or test device. Specifically excluded from designations as CNWDI is information concerning:

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Critical Nuclear Weapon Design Information (CNWDI)

Critical Nuclear Weapon Design Information (CNWDI) (continued)

- (a) arming, fusing, and firing systems;
- (b) limited life components;
- (c) total contained quantities of fissionable, fusionable, and high explosive materials by type; and
- (d) components which military personnel set, maintain, operate, test, or replace.

(5610.2)

Critical organ

The human organ or tissue receiving the largest fraction of a specified dose limit.

(5400.XY)

Critical pathway

The specific route of transfer of radionuclides from one environmental component to another (e.g., from one trophic level to another) that results in the greatest fraction of an applicable dose limit to a population group or an individual's whole body, organ, or tissue. (5400.XY)

Critical population group

The population group showing the greatest fraction of an applicable radiation dose limit as a result of site releases. (5400.XY)

Critical resources

Those physical and information assets required for the performance of the site mission. (5637.1)

Critical self-assessment

A systematic evaluation of facility maintenance program, including procedures, activities and practices using the Guidelines For The Conduct Of Maintenance At DOE Nuclear Facilities, or performance criteria developed therefrom as the evaluation standard. (5480.MAINT)

Critique meeting

A formal meeting with individuals having knowledge of an Unplanned Event. It provides for timely investigation, based on accurate descriptive testimony and documentation of the facts pertaining to the Unplanned Event, and identifies any need for further investigative or corrective actions(s). (RF 5000.3, Rev. 1)

Critique report

The written report containing the results of any preliminary investigation of the Unplanned Event and the critique meeting, if held. Use the format in Attachment 2 to the Appendix. (RF 5000.3, Rev. 1)

Cross-cut budget

Field budget data involving Capital Equipment not related to construction, General Plant Projects, and Real Property Maintenance and submitted in specified format in response to the Field Budget Call. (4330.4)

Crossing frogs

A device that enable the wheels of a train to cross the rail of an intersecting track. (6430.1A)

Crosswalk

The expression of the relationship between one set of classifications and another, such as between appropriation accounts and authorizing legislation or between the budget functional structure and the congressional committee spending jurisdictions. (2200.4)

Crown, roadway

The high point of a roadway cross-section (usually at the center line). (6430.1A)

Crypto

A designation or marking applied to classified and unclassified telecommunications keying material indicating that it requires special accounting and safeguarding. (6430.1A) (5632.1A)

Cultural resource sites

Human-associated ruins of archaeological significance. (6430.1A)

Curb inlet

An inlet to a subsurface stormwater conveyance system. (6430.1A)

Curb return

The end point of a curb radius. (6430.1A)

Current files

Files referred to frequently in the conduct of current business and maintained in office space of the using organization. (1324.2A)

Current files area

Current files area

The office or laboratory space used for the maintenance of current records. (1324.2A)

Current pay account

Can include basic pay, special pay, incentive pay, retainer pay, or, in the case of an individual not entitled to basic pay, other authorized pay. (2200.2A)

Custodian

1: Any person or office or small unit level to whom a classified document is charged by records of the DOE or DOE contractors, or in the case of a Confidential document in the absence of records, any person who possesses the document. (5635.1A); 2: Any person having assigned responsibility for the control and accountability of classified matter. (5632.1A)

Custodian of record

All authorized top secret classifiers, original or derivative, and other permanent holders of top secret documents. (5635.1A)

Custody

1: Responsibility for the control, transfer, movement, and access to nuclear explosives and components. Custody includes the maintenance of accountability for nuclear explosives and components. (5610.3); 2: Responsibility for the control of and access to nuclear explosives. (5610.11)

Customers

Those internal and external to the organization, who will use or are affected by the output of one's work. (QC-2)

DOE ORDER DEFINITIONS

D

Damage assessment

The capability to estimate the damage to DOE operations, facilities, and equipment as the result of an emergency. (5500.1A, Change 1)

Danger area

An area which poses increased vulnerability to personnel due to lack of cover and/or concealment, such as roads, parking lots, open areas. (5632.1A)

DARTS inventory of audit reports

A formal report listing all audit reports included in DARTS for each departmental element. (2300.1A)

DARTS status report

A formal report indicating action which has been taken pursuant to recommendations outlined in audit reports and in accordance with the audit action plan. (2300.1A)

Data encryption standard

A standard algorithm implemented in electronic hardware devices used for cryptographically protecting certain U. S. Government information. See Federal Information Processing Standard Publication 46. (5300.3B)

Data processing facility

The personnel, hardware, software, and physical facilities of an organizational entity whose primary function is the operation of one or more computers. (2100.8)

Data validation

A systematic review of a data set to identify outliers of suspect values. The process uses appropriate statistical techniques to screen out impossible or highly unlikely values. (5400.XY)

Datum

A direction, level or position from which angles, heights or distances are conveniently measured. (6430.1A)

Days**Days**

Calendar days. (3750.1, Change 3) (3771.1, Change 1)

Dead load

A non-varying load exerted by the weight of a mass at rest. (6430.1A)

Deadly force

That force which a reasonable person would consider likely to cause death or serious bodily harm. (5632.1A)

Debt

1: Describes an amount of money owed to the United States from: loans, insured or guaranteed by the United States; fees, leases, rents, royalties, services, sales of real or personal property, overpayments, penalties, damages, interest, fines, and forfeitures; and other claims and similar sources. (2200.2A); 2: An amount of money or property that has been determined by an appropriate agency official to be owed to the United States by any person, organization, or entity, except another Federal agency. (2200.4)

Deciding official

The management official designated to make the final decision on a notice of proposed action issued by Department Official at a lower management level. (3750.1, Change 3) (3771.1, Change 1)

Decision unit

A program entity for which various funding requests may be developed. It represents a division of all of the activities for which managers are responsible into discrete elements. While the strategic program planning cycle allowance table will address the major activity level of detail, justifications should discuss a lower level of programmatic detail, as indicated in the structure accompanying the annual call letter. (5100.4)

Declaration of taking

A pleading filed in a court with a condemnation proceeding whereby, with the deposit of just compensation, the interest in the property, as stated in the pleading, is vested at once in the Government. (4300.1B)

Declassification

- (a) A determination by appropriate authority that information no longer requires classification protection.
- (b) A determination by appropriate authority in accordance with approved classification policy or guidance that a previously classified document or material is no longer classified.
- (c) The removal of classification markings from a document or material in accordance with a declassification notice from an appropriate authority.

(5635.1A)

Declassified document

A previously classified document that has been declassified by appropriate authority in accordance with approved declassification procedures and from which the classification markings have been removed or defaced. (5635.1A)

Decommissioning

- 1: The process of closing and securing a nuclear facility, or nuclear materials storage facility so as to provide adequate protection from radiation exposure and to isolate radioactive contamination from the human environment. (6430.1A);
- 2: Actions taken to reduce the potential health and safety impacts of DOE contaminated facilities, including activities to stabilize, reduce, or remove radioactive materials or to demolish the facilities. (5820.2A)

Decontamination

- 1: The act of removing a chemical, biological, or radiologic contaminant from, or neutralizing its potential effect on, a person, object or environment by washing, chemical action, mechanical cleaning, or other techniques. (6430.1A);
- 2: The removal of radioactive contamination from facilities, equipment, or soils by washing, heating, chemical or electrochemical action, mechanical cleaning, or other techniques. (5820.2A);
- 3: The process of reducing contamination to comply with applicable standards or criteria. (5480.14)

Decremental funding

Decremental funding

A reduced level of funding for a decision unit which, when added together with the other decremental levels of an organization's decision units, equals 90 percent of the OMB guidance for the organization. This does not mean that each and every decision unit must be reduced by 10 percent, rather some may be reduced by an amount less than 10 percent, and offset in another decision unit with a reduction greater than 10 percent, so that when all decremental levels of a given organization are added together, they total 90 percent of the OMB guidance for the organization. In making this reduction, organizations should not assume that funding for the reduced activities would be restored in subsequent years. (5100.4)

Dedicated fire water system

A water storage and distribution system that is available for and used solely for fire protection purposes, as opposed to a combined system that may be used for potable and process water supply in addition to fire protection. (6430.1A)

Deed

A written instrument whereby title to real estate is transferred. Deeds are usually under seal and must be recorded. (4300.1B)

Deemed to have been received

The determination by which the DOE establishes the commencement of the 10 working days (excluding Saturday, Sunday, and Federal holidays) response period. (1800.1A)

Deep dose equivalent

As used in this Order, means the dose equivalent in tissue at a depth of 1 cm deriving from external (penetrating) radiation. (5400.XY)

Defective firearm

A firearm that, because of improper assembly, excessive wear, or broken or missing parts, does not function according to design specifications. (5480.16, Change 2)

Defense in depth

Physical protection systems in sufficient strength to constitute more than a single layer of security for a target such as concentric rings of security. (5632.1A)

Defense priorities and allocations system

A regulation and procedures that operate to direct the flow of material and products to national defense programs and programs which maximize domestic energy supplies; provides for preferential treatment by industry of contracts and orders placed in support of the programs, and maintains an administrative means of promptly mobilizing the total economic resources of the nation in the event of a national emergency. (5560.1A)

Defense Technical Information Center (DTIC)

The central facility of the DOD for secondary distribution of technical reports generated by research, development, test, and evaluation efforts sponsored by the Department of Defense. (5610.2)

Defensive security briefing

Held prior to foreign travel to sensitive countries by individuals who hold or have held, within the last 5 years, a DOE access authorization and involves a discussion of the potential hazards to DOE programs or to the personal safety of the traveler. (1500.3)

Deferral

1: A deferral consists of any action or inaction by an officer or employee that temporarily withholds, delays, or effectively precludes the obligation or expenditure of budget authority. Congressional notification is required on all deferral proposals. (2100.4A); 2: Any action or inaction by an officer or employee of the United States Government which temporarily withholds, delays, or effectively precludes the obligation or expenditure of budget authority. Deferrals consist of amounts reserved for contingencies pursuant to section 1512 of Title 31 U.S.C. as amended, and amounts temporarily withheld through the apportionment process for other reasons pursuant to the Congressional Budget and Impoundment Act (31 U.S.C. 1403). (5100.13)

Deficiency apportionments

Deficiency apportionments

Apportionments that anticipate the need for a deficiency appropriation or a supplemental appropriation under Title 31, Section 1515, of the United States Code, are specifically identified on the apportionment request (standard form 132). To qualify as a deficiency apportionment, the request must be required by laws enacted subsequent to the transmittal to Congress of the annual budget for the year; emergencies involving human life, the protection of property, or the immediate welfare of individuals; or specifically authorized by law. The approval of a deficiency apportionment by the Office of Management and Budget and its transmittal to Congress merely advises the Congress that funds appropriated to date are being obligated at a more rapid rate than was anticipated. This notification does not guarantee that the Congress will approve any part of any associated supplemental requests and does not authorize the use of any amounts not yet provided. DOE 5100.12 Budget Execution, Department Of Energy Base Table, contains a full statement of DOE policies on apportionments. (2200.4)

Deflagration

A rapid chemical reaction in which the output of heat is sufficient to enable the reaction to proceed and can be accelerated without input of heat from another source. Deflagration is a surface phenomenon, with the reaction products flowing away from the unreacted material along the surface at subsonic velocity. The effect of a true deflagration under confinement is an explosion. Confinement of the reaction increases pressure, rate of reaction and temperature, and may cause transition into a detonation. (6430.1A)

Deflection angle

The angle measured between a foresight and a prolongation of the backsight. (6430.1A)

Delegate agency

A government agency authorized by delegation from the Department of Commerce to place priority ratings on contracts or orders needed to support authorized programs. DOE is a delegate agency. (5560.1A)

Delegated contract authority

The authority redelegated from the Director of Procurement and Assistance Management to heads of contracting activities authorizing them to enter into contracts within specified dollar limitations and other contract conditions. (4540.1B)

Department of Energy Records Schedules (DOERS)

Delinquent debt

Designates a debt which has not been paid by the date specified in the creditor agency's initial written notification or applicable contractual agreement, unless other satisfactory payment arrangements have been made by that date. In addition, a debt is delinquent if the debtor fails to satisfy obligations under a payment agreement with the creditor agency. (2200.4)

Denying official

1: An individual who denies any request made under statute or Executive order for all or any portion of a document or material containing UCNI. (5635.4); 2: An individual who denies under the procedures on page 16, paragraph 10d, any request made under statute or Executive order for all or any portion of a document or material containing UCNI, and is defined in DOE 1700.1. (5650.3, Change 1)

Deobligation

The particular complete reversal of an obligation. See Obligations. (2200.4)

Department of Energy assistance

Includes: (a) grants and loans of Federal funds; (b) the grant or donation of Federal property and interest in property; (c) the sale, lease of, and the permission to use Federal property or the furnishing of services with or without reduced consideration; and (d) any Federal agreement, arrangement, or other contract which has, as one of its purposes, the provision of assistance. (1600.6)

Department of Energy contractor or contractor facilities

Operating and onsite service contractors who manage or operate Department-owned or controlled laboratories, production plants, and research facilities; or, onsite service contractors who perform services of a continuing nature at Department-owned or controlled sites, as defined in DOE Procurement Regulations 9-50-001. (3220.2)

Department of Energy Records Schedules (DOERS)

Issued by DOE (DOE 1324.2A, chapter V) on the basis of NARA-approved disposition authorizations for records unique to DOE. The DOERS and the NARA-published General Records Schedules (GRS) together apply to records in the custody of M&O contractors and the Department. For other contractors (see "Definitions" in Attachment 1 to DOE 1324.2A) the provisions of DOE 1324.2A cover records involving health and health-related matters of their employees who are/were involved in the performance of a contract with the Department. (1324)

Department of Energy waste

Department of Energy waste

Radioactive waste generated by activities of the Department (or its predecessors), waste for which the Department is responsible under law or contract, or other waste for which the Department is responsible. Such waste may be referred to as DOE waste. (5820.2A)

Departmental-approved equipment

1: Equipment (e.g., alarm, assessment, monitoring, detection) used in conjunction with all or other elements of a site-specific safeguards and security system as described in the site-specific safeguards and security plan (after such plan is approved by the Departmental element). (6430.1A);

2: Equipment such as alarms, assessment, monitoring, and detection used in conjunction with all other elements of a site-specific safeguards and security system, as described in a site-specific safeguards and security plan or MSSA that has been approved by the responsible Departmental Element. (5632.1A)

Departmental Directives Control Point (DCP)

Information Management Systems Branch, MA-213.1, in the Office of Organization and Management Systems, MA-21, is the Departmental control point for: (a) the review, coordination, analysis, processing, and publication of all DOE-wide policy and procedures; (b) all liaison between initiating and approving officials. (1321.1B, Change 1)

Departmental elements

1: DOE headquarters and field organizations. (6430.1A); 2: DOE headquarters offices and operations offices. (5480.3A)

Departmental integrated standardized core accounting system

The decentralized-accounting-process system, with common hardware and software, used by all field elements except the power marketing administrations. The system ensures that changes made centrally, by a single programming staff, have uniform application. (2200.4)

Departmental position

The official Departmental position of the findings and recommendations contained in final IG reports, including planned corrective actions to be taken by management, with appropriate target dates. (2320.2A)

Derivative classification

Departmental property

All land, buildings, and structures (real property) and portable equipment, records, and supplies (personal property) which are owned, rented, or leased by the U.S. Government from commercial sources and subject to the administrative custody or jurisdiction of the Department. (5632.1A)

Department's metric coordinator

A person designated by the Assistant Secretary for Environment to act as the Department's central point of contact for metrication matters. (5900.2)

Department's procurement

Any contract, grant, or cooperative agreement awarded by or for the Department of Energy. (5900.2)

Depreciation

In general, the expiration or consumption, in whole or in part, of the service life, capacity, or utility of plant facilities and equipment, resulting from such factors as wear and tear, decay, elements, and obsolescence. Depreciation expense is that portion of the cost of units or groups of plant facilities and equipment that is allocated to an accounting period (month or fiscal year) and charged to the operating cost of an activity. Depreciation accounting is the systematic allocation of the cost of depreciable plant facilities and equipment over their estimated useful service life, i.e., a process of allocation or amortization, not of valuation. (2200.4)

Derivative classification

- (a) **Restricted Data or Formerly Restricted Data** A determination made by an authorized classifier other than the original classifier in accordance with approved classification guidance or source documents that a document or material contains Restricted Data or Formerly Restricted Data.
- (b) **National Security Information** A determination made by an authorized classifier other than the original classifier in accordance with approved classification guidance, source documents, or other instructions from an original classifier that a document or material contains national security information.

(5635.1A)

Derived Air Concentration (DAC)

Derived Air Concentration (DAC)

Quantity obtained by dividing the ALI for any given radionuclide by the volume of air breathed by an average worker during a working year. ($2.4 \times 10^3 \text{ m}^3$) (5480.11, Change 1)

Derived Concentration Guide (DCG)

1: The concentration of a radionuclide in air or water that, under conditions of continuous exposure for one year by one exposure mode (i.e., ingestion of water, submersion in air, or inhalation), would result in either an effective dose equivalent of 0.1 rem (1 mSv) or a dose equivalent of 5 rem (50 mSv) to any tissue, including skin and lens of the eye. DCG values are presented in Chapter III. (5400.XX); 2: The lesser of the concentrations of a radionuclide in air or water that, under conditions of continuous exposure by one exposure mode (i.e., ingestion of water, or submersion in air, or inhalation) for one year for a "reference man," would result in either an effective dose equivalent of 100 rem (1 mSv) or a dose equivalent of 5 rem (50 mSv) to any tissue, including the skin and lens of the eye. (5400.XY); 3: The concentration of a radionuclide in air or water that, under conditions of continuous exposure for one year by one exposure mode (i.e., ingestion of water, submersion in air, or inhalation), would result in an effective dose equivalent of 100 mrem 0.1 rem (1 mSv). DCGs do not consider decay products when the parent radionuclide is the cause of the exposure (DCG values are presented in Chapter III) (1 rem = 0.01 sievert). (5400.5, Change 1)

Derogatory information

Refers to unfavorable information on an individual which brings into question the individual's eligibility or continued eligibility for access authorization or suitability for Federal employment. Specific types of derogatory information are listed in 10 CFR 710 and Executive Order 10450. (5631.2B)

Design

The visual and aesthetic content of the publication, including illustrations, photographs, charts, diagrams, graphs, maps, the use of color, type sizes, and word/space relationships. (1340.1A)

Design agency

A DOE contractor responsible for the design of DOE weapons and weapons-related material and the integrity of the design through stockpile life. (QC-1, Rev. 5)

Design information questionnaire

Design Basis Accidents (DBAs)

Postulated accidents, or natural forces, and resulting conditions for which the confinement structure, systems, components and equipment must meet their functional goals. These safety class items are those necessary to assure the capability to safely shut down operations, maintain the plant in a safe shutdown condition, and maintain integrity of the final confinement barrier of radioactive or other hazardous materials; to prevent or mitigate the consequences of accidents; or to monitor releases that could result in potential offsite exposures. (6430.1A)

Design Basis Earthquake (DBE) (equivalent to safe shutdown earthquake)

An earthquake that is the most severe design basis accident of this type and that produces the vibratory ground motion for which safety class items are designed to remain functional. (6430.1A)

Design Basis Fire (DBF)

A fire that is the most severe design basis accident of this type. In postulating such a fire, failure of automatic and manual fire suppression provisions shall be assumed except for those safety class items/systems that are specifically designed to remain available (structurally or functionally) through the event. (6430.1A)

Design Basis Flood (DBFL)

A flood that is the most severe design basis accident of that type applicable to the area under consideration. (6430.1A)

Design Basis Tornado (DBT), explosion or criticality

A tornado that is the most severe design basis accident of that type applicable to the area under consideration. (6430.1A)

Design documents

Drawings, specifications, criteria letters, requirements documents, engineering releases, change orders, etc. (QC-2)

Design flood

The flood, (either observed or synthetic) chosen as the basis for the design of a hydraulic structure. (6430.1A)

Design information questionnaire

An IAEA form used in accordance with the agreement or the protocol for providing to the IAEA information on facilities selected by the IAEA. There are different forms for different types of facilities. (1270.2A)

Designated agent

Designated agent

A Department of Energy (DOE) employee who is authorized by DOE to receive legal process from a court of competent jurisdiction, identify the named obligor, and suspend payment of monies necessary to comply with the legal process. (2200.11)

Designated billing office

The place named in a contract where the contractor forwards invoices for approval or, in certain instances, for payment. (2200.4)

Designated laboratory director

1: Within the context of this Order, includes the Directors of Argonne National Laboratory, Brookhaven National Laboratory, Ames Laboratory, Fermi National Accelerator Laboratory, Idaho National Engineering Laboratory, Lawrence Berkeley Laboratory, Oak Ridge National Laboratory, Pacific Northwest Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratory, Los Alamos National Laboratory, and Stanford Linear Accelerator Center. These Laboratory Directors are all eligible to be certified to approve nonsensitive contractor travel in accordance with paragraph 8e(3). (1500.3); 2: Within the context of this Order, is limited to the Directors of Ames Laboratory, Argonne National Laboratory, Brookhaven National Laboratory, Environmental Measurements Laboratory, Fermi National Accelerator Laboratory, Idaho National Engineering Laboratory, Lawrence Berkeley Laboratory, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Morgantown Energy Technology Center, Mound Facility, New Brunswick Laboratory, Oak Ridge National Laboratory, Pacific Northwest Laboratory, Pittsburgh Energy Technology Center, Princeton Plasma Physics Laboratory, Solar Energy Research Institute, Stanford Linear Accelerator Center, and the President of Sandia National Laboratories. These Laboratory Directors and the Sandia President are eligible to be assigned authority to approve visits and assignments in accordance with paragraph 8d(4). (1240.2A)

Designated physician

1: A duly licensed physician used to make medical determinations in filling motor vehicle operator positions. (3791.2A); 2: A site physician designated by the Medical Director, EH-30.1, following selection and nomination by the appropriate program manager. (5480.YY)

Detector

Designated psychiatrist

A psychiatrist designated by the HQ Medical Director, EH-30.1, following selection and nomination by the Site Occupational Medical Director. (5480.YY)

Designated psychologist

A psychologist designated by the HQ Medical Director, EH-30.1, following selection and nomination by the Site Occupational Medical Director. (5480.YY)

Destruction

The physical alteration of ADP System media or of ADP System components such that they can no longer be used for storage or retrieval of information. (5637.1)

Detection

The positive assessment that a specific object is the cause of an alarm. (6430.1A)

Detection equipment

Any equipment or system that is designed to provide a high probability of positive assessment of intrusion. (6430.1A)

Detection-recognition-identification

Detection is the positive assessment that a specific object is the cause of an alarm. Recognition is the positive assessment that the detected object is human, animal, or something else. Identification is the positive assessment of the recognized object as a specific human, animal, or something else. (5632.1A)

Detection zone

The volume of space under surveillance of an intrusion detection aid that will cause an alarm when the space is penetrated. (5632.1A)

Detector

A device for converting radiation flux and energy to a signal suitable for measurement purposes. (5400.XY)

Determination

Determination

A decision as to whether official foreign travel is acceptable from foreign policy, national security, or technology transfer concerns. (1500.3)

Detonation or explosion

A violent chemical reaction within a chemical compound or mechanical mixture evolving heat and pressure. It is a reaction that proceeds through the reacted material toward the unreacted material at a supersonic velocity. The result of the chemical reaction is the exertion of extremely high pressure on the surrounding medium, forming a propagating shock wave of supersonic velocity. For the purposes of these criteria the terms detonation and explosion will be used interchangeably regardless of the velocity of the reaction or propagating shock wave. (6430.1A)

Detonator

The explosive device that is used to initiate the detonation of other explosives. (6430.1A)

Development costs

Research that is incidental to manuscript preparation, writing, editing, and necessary graphics. If composition costs are separated from printing charges, these costs also must be included. (1340.1A)

Diffuse source

A source or sources of radioactive contaminants (emissions) released into the atmosphere that do not have a defined point (origin) of release, i.e., a non-point source. Such sources are also known as area sources. (5400.XY)

Direct access

Access to Category I quantities of SNM which would permit an individual to remove or misuse that material in spite of any controls that have been established to prevent such unauthorized actions. Category I quantities of SNM are defined in DOE 5633.3, CONTROL AND ACCOUNTABILITY OF NUCLEAR MATERIALS. (5631.6)

Direct cost

Any cost that can be identified specifically with a particular final cost objective. (2110.1A)

Director of emergency operations (DP-6)

Directives

(Orders, Notices, and Page Changes) are written, permanent, and temporary issuances affecting more than one DOE organization, which: (a) establish or change policies, organization, methods, standards, or procedures; (b) guide, instruct, and inform employees in their work; (c) require action or impose workload; (d) give information essential to the administration or operation of the Department; or (e) transmit other information to employees of the Department when use of DOE publications would not be practicable. (1321.1B, Change 1)

Directives Points of Contact (DPC)

Are the central points of contact designated by Heads of Departmental Elements to: (a) represent them on all directives matters; (b) fulfill the responsibilities outlined in this directive, and specifically in Chapters VI and IX; and (c) act as liaison between their organizations and the Departmental Directives Control Point. (1321.1B, Change 1)

Direct loan

A disbursement of funds (not in exchange for goods or services) that is contracted to be repaid with or without interest. Direct loans may include direct Federal participation in loans privately made or held, and the purchase of private loans through secondary market operations. (2100.4A) (2200.4)

Director Central Intelligence (DCI) authorized control markings

The six caveats approved for use with other security markings:

- (a) **WNINTEL WARNING NOTICE**—Intelligence sources or methods involved;
- (b) **ORCON** Dissemination and extraction of information controlled by Originator;
- (c) **NOCONTRACT** Not releasable to contractors/consultants;
- (d) **PROPIN** Caution—Proprietary information involved;
- (e) **NOFORN** Not releasable to foreign nationals;
- (f) **REL** Authorized for release to (country).

(5635.1A)

Director of emergency operations (DP-6)

The DOE official with responsibility to coordinate the planning, development, and implementation of the overall DOE Emergency Management System. (5500.8) (5500.1A, Change 1)

Director, emergency management team**Director, emergency management team**

A predesignated senior official identified to direct an emergency management team. (5500.1A, Change 1)

Disallowed cost

1: The amount of claimed or reimbursed contract or grant cost determined by a contracting officer to be unallowable and therefore not payable or that is recoverable by the Government. (2200.4); 2: The amount of questionable cost determined by a contracting officer to be unallowable and therefore not payable by the Department. (2300.1A)

Disaster recovery plans

Documents containing procedures for emergency response, extended backup operations, and post-disaster recovery should a computer installation experience a partial or total loss of computer resources and physical facilities. The primary objectives of these plans, in conjunction with contingency plans, are to provide reasonable assurance that a computer installation can recover from such incidents, continue to process mission-essential applications in a degraded mode (i.e., as a minimum, process computer applications previously identified as most essential), and return to a normal mode of operation within a reasonable amount of time. Such plans are a protective measure generally applied based on assessments of risk, cost, benefit, and feasibility as well as the other protective measures in place. (1360.2A)

Disbursements

See Outlays. (2200.4)

Discharge point

Any discernible, confined, and discrete conveyance, including but not limited to any pit, ditch, channel, tunnel, conduit, well, discrete fissure, container, or vessel from which any radioactively contaminated water is discharged to waters accessible by the general public. (5400.XY)

Discount date

The date by which, if payment is made, a specified discount can be taken. (2200.4)

Discrimination

1: An unlawful employment practice based on race, color, religion, sex, national origin, age, and/or physical or mental handicap. It shall be an unlawful employment practice for the Department of Energy, because of an individual's race, color, religion, sex, national origin, age, and/or physical or mental handicap; (a) to fail or refuse to hire or to discharge any individual, or otherwise discriminate against any individual with respect to his or her compensation, terms, conditions, or privileges of employment; (b) to limit, segregate, or classify employees or applicants for employment in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his or her status as an employee; (c) to discriminate against any individual in admission to or employment in any program established to provide apprenticeship or other training, or retraining, including on-the-job training. (1600.5); 2: An illegal difference in the treatment of persons, either intentionally or unintentionally, based on race, color, religion, sex, national origin, age, handicap, or veteran status. (3220.2); 3: Discharge, demotion, reduction in pay, coercion, restraint, threats, or other negative actions taken against a contractor employee by a contractor, as a result, of the employee's exercise of a occupational safety and health rights set forth in this Order. (5483.1A)

Disposable pay

Describes that part of current basic pay, special pay, incentive pay, retired pay, retainer pay, or in the case of an employee not entitled to basic pay, other authorized pay remaining after the deduction of any amount required by law to be withheld. Agencies must exclude deductions described in 5CFR 581.105(b) through (f) to determine disposable pay subject to salary offset. (2200.4) (2200.2A)

Disposal

1: Emplacement of waste in a manner that assures isolation from the biosphere for the foreseeable future with no intent of retrieval and that requires deliberate action to regain access to the waste. (5820.2A); 2: Emplacement of waste in a manner that assures isolation from the biosphere for the foreseeable future with no intent of retrieval and that requires deliberate action to regain access to the waste. (4300.1B)

Disposal facility

The land, structures, and equipment used for the disposal of waste. (5820.2A)

Disposal site**Disposal site**

That portion of a disposal facility which is used to dispose of waste. For low-level waste, it consists of disposal units and a buffer zone. (5820.2A)

Disposal unit

A discrete portion (e.g., a pit, trench, tumulus, vault, or bunker) of the disposal site into which waste is placed for disposal. (5820.2A)

Disposition

An action taken to remove records from current files, including transfer to local records holding areas, to Federal Records Centers, to the National Archives for permanent retention, or for destruction. (1324.2A)

Dissuasion

An effort by a DOE official to discourage official or unofficial travel to sensitive countries by an individual who for programmatic reasons, or reasons of national security, or personal safety should not risk traveling, under certain circumstances, to sensitive countries. (1500.3)

Distribution

- (a) Initial or Primary—that distribution which is made automatically and routinely to an approved mailing list immediately following the initial printing. Normally, it will consist of one or more of the following mailing lists: (1) Office of Administrative Services (MA-40) document distribution system lists; (2) Technical Information Center (MA-7) Standard Category lists; (3) special one-time lists; and (4) storage copies for MA-7 secondary distributions.
- (b) Secondary—response to requests and distribution plans following the primary distribution. (1340.1A)

Distribution and storage costs

Costs of both direct distribution (at time of printing) and indirect distribution (from inventory in response to requests). The indirect costs should involve an average cost as well as single-copy and bulk distribution costs. Storage costs reflect the per-square-foot cost of warehousing the inventory on an annual basis. (Note: This definition refers to all authorized distribution and storage sites except the Technical Information Center, which is discussed in Chapter III.) (1340.1A)

Diversion

The unauthorized removal of nuclear material from its approved use or authorized location. The definition of "authorized location" in the context of diversion of nuclear materials is the responsibility of the cognizant operations office. (5633.3, Change 1)

Diversionary devices

Special purpose pyrotechnic munitions (known as flash bangs, stun grenades, and flash grenades) intended to give protective forces nonlethal force options whenever possible. (5480.16, Change 2)

DO

The rating symbol assigned to all authorized programs which are not DX programs. (5560.1A)

Document

1: Any record of information regardless of physical form or characteristics, including, but not limited to the following:

- (a) handwritten, printed, or typed matter;
- (b) painted, drawn, or engraved matter;
- (c) sound, magnetic, optical or electromechanical recordings;
- (d) photographic prints and exposed or developed film or still or motion pictures;
- (e) automatic data processing input and contents of equipment and/or media including memory, punch cards, taped, diskettes, and visual displays;
- (f) reproductions of the foregoing by any process.

(5635.1A); 2: Any recorded data, regardless of the form, not limited to, but including: handwritten, printed, or typed; painted, drawn, or engraved; magnetically or electromagnetically recorded; on paper, plastic, or metal tapes, punched cards, or aperture cards; contained on exposed film, or in photographs; any reproduction of the foregoing. (5610.2)

Documentation

Documentation

1: The incorporation of appropriate identification on a publication such as document number; title; individual and corporate authors; contract number; whether revised or reprinted; volume number; conference information [title, date, place, sponsor(s)], responsible office, and Departmental Element; date and place (city, state, and ZIP code) of publication; and any restrictions to its use such as security classification, proprietary restrictions, stock statement, and disclaimer language. (1340.1A); 2: An annotation, on the face of a classified document, of the number of pages of a document, the series designation for the particular set of copies, and number of each copy within the set. (5635.1A); 3: Paperwork related to the resolution and implementation process consisting of all memoranda, letters, and responses that provide the course of action taken by management that would enable a third party to reconstruct the resolution decisions and implementation actions taken. (2300.1A)

Document certification

An attestation to the fact that documents are true and official issuances, appropriately signed and stamped, and ready for transmittal to the Office of the Federal Register. (1900.1D)

Document distribution system

A headquarters-managed, computer-based system designed for updating distribution lists, producing mailing labels, and identifying copy requirements. (1340.1A)

Document or material

Indicates the physical medium on or in which information is recorded, or a product or substance which contains or reveals information, regardless of its physical form or characteristics. (5650.3, Change 1) (5635.4)

Document registry system

A computerized inventory control and accountability management system operated by the Technical Information Center for registering DOE publications, for providing an historical record of dissemination data, for maintaining records of demand, and for providing on-demand distribution for publications. (1340.1A)

Documents

Documents, including both design agency drawings and specifications, and manufacturing and inspection work instructions, procedures, drawings and specifications, may be in hard copy form or through software stored on computer tapes, discs or other suitable media. They may be transmitted to the point of use without being transcribed on paper, such as to a computer terminal, video screen or directly to a machine. (QC-1, Rev. 5)

DOE

U.S. Department of Energy. Means all organizational units of the Department of Energy. (1000.2)

DOE acceptance

The acceptance of material by the DOE based upon the results of DOE quality assurance activities and production agency substantiating quality evidence. (QC-1, Rev. 5)

DOE alternative

1: An administrative relief from DOE regulations that meets and provides equivalent health and safety protection. (1540.2, Change 1); 2: A document providing approval by DOE Headquarters of relief from one or more provisions of the DOT regulations for offsite shipment of hazardous materials in public-owned and operated vehicles. The approval shall be based on a demonstrated equivalent level of safety consistent with the public interest. (5480.3A)

DOE and NRC certificate of compliance

A certificate issued by DOE or NRC, as appropriate, approving for use with specified limitations a specific packaging for quantities of radioactive materials exceeding A1/A2 quantities as defined in DOE and NRC regulations. (1540.2, Change 1) (1540.3)

DOE base table

A document which displays the budgetary resources available for obligation for operating expenses, capital equipment, and construction at a level of detail consistent with Congressional requirements. It is the controlling document which provides the basis for the DOE allotment and Approved Funding Program (AFP) system. (5100.12)

DOE cognizant authority

See Cognizant DOE authority. (6430.1A)

DOE contractor

DOE contractor

1: Includes any prime contractor or subcontractor subject to the contractual provisions of 48 CFR 923.70, 48 CFR 970.23, or other contractual provisions where DOE has elected to enforce ES&H requirements by specific negotiated contract provisions. (5482.1B) (5480.1B) (5400.1, Change 1) (5480.XX) (5480.YY) (5000.XYZ); 2: A prime contractor or subcontractor of the Department of Energy. (1540.1); 3: A contractor managing or operating a Government-owned or -leased facility on behalf of the Department of Energy. (1540.2, Change 1); 4: For the purpose of this Order, the term includes management and operating contractors, on-site service contractors and construction contractors and subcontractors at sites where nuclear work is performed (i.e., sites subject to Sections 161 (b) and (i) of the Atomic Energy Act of 1954, as amended). (3220)

DOE contractors

1: Entities who receive awards from DOE, including management and operating contractors (M&O), which manage, operate, or provide site services to DOE research or production facilities that are principally engaged in work for the Department. (1300.3); 2: Contractors, including M&O contractors, who manage, operate, or provide site services to DOE research or production facilities that are principally engaged in work for the Department. (4300.2A)

DOE energy management coordinator

The DOE site representative designated responsible for energy management. (6430.1A)

DOE facilities

1: Any of the DOE-owned, leased, or controlled facilities. (1300.3); 2: Any of DOE-owned research or production facilities. (4300.2A, Change 2)

DOE facility representative

For each major facility or group of lesser facilities, an individual (or his or her designee) assigned responsibility by the Head of the Organization/Field Element for monitoring the performance of the facility and its operations. This individual shall be the primary point of contact with the contractor and will be responsible to the appropriate Program Senior Official and Head of Field Organization/DOE program office and field elements for implementing the requirements of this Order. (5000.3A) (5480.19)

DOE field review

A DOE-initiated review of DOD nuclear weapon and/or nuclear weapon system activities/operations to satisfy the DOE's dual-agency responsibility to protect public health, safety, and the environment. (5610.13)

DOE fire protection authority

The DOE site representative responsible for fire protection. (6430.1A)

DOE Offsite Technical Director (OSTD)

Official selected by the DOE team leader with the concurrence of the Director, Emergency Action and Coordination Team (EACT), responsible for coordinating the Federal radiological monitoring and assessment activities under the Federal Radiological Monitoring and Assessment Plan (FRMAP) for the DOE team leader. (5530.1)

DOE Onsite Technical Director (OTD)

Official selected by the DOE team leader with the concurrence of the Director, Emergency Action and Coordination Team (EACT), responsible for directing the onsite operations for the DOE team leader. (5530.1)

DOE operations

1: For the purposes of this Order, are those DOE managed, directed, or funded activities for which the Department has responsibility for Environment, Safety and Health (ES&H). (5400.1, Change 1); 2: Those DOE-funded activities for which DOE has assumed responsibility for the environment, safety, and health programs. (5000.XYZ) (5480.1B); 3: A general term intended to encompass individual operations or efforts in the aggregate rather than separately. (5481.1B, Change 1)

DOE prescribed OSHA standards

Occupational Safety and Health requirements promulgated under Public Law 91-596 and listed on page I-1, paragraph 1. (5483.1A)

DOE program

An organized set of activities within a resource area having common objectives based on strategy set forth to meet assigned goals. It may include one or more projects and research and development activities in support of new, improved, or more efficient supply, or conservation systems or procedures. (5700.6B, Change 1)

DOE program missions

DOE program missions

Basic statutory activities of the Department, such as nuclear weapons and materials, production and support, energy technology development, and basic research. (4300.2A, Change 2)

DOE/Recon

A Department-wide online interactive information retrieval system through which the Department and contractors gain access to over 1.7 million abstracted and indexed citations to scientific and technical energy information needed to expedite mission accomplishment. DOE/Recon provides access to over 30 bibliographic and nonbibliographic data bases covering patents, research and development reports, summaries of energy research projects, domestic and foreign journals, monographs, speeches, graphs, tables, and other materials. (1340.1A)

DOE reservation

A location consisting of a DOE-controlled land area including DOE-owned facilities (e.g., the Oak Ridge Reservation) in some cases referred to as a Site, such as the Nevada Test Site, the Hanford Site; or as a Laboratory, such as the Idaho National Engineering Laboratory; or as a Plant, such as Rocky Flats Plant; or as a Center, such as the Feed Materials Production Center. (5820.2A)

DOE safeguards and security coordinator

The DOE site representative designated responsible for safeguards and security. (6430.1A)

DOE team leader

1: That individual designated by the Director of the Emergency Action and Coordination Team (EACT) to manage the DOE field activities in response to a non-DOE nuclear weapons accident/incident. If the Department of Defense (DOD) or other Federal agency has the primary responsibility for responding to the emergency, the DOE Team Leader would act as a member of the staff of the DOD On-Scene Commander, or other Federal lead official. (5500.4);
2: A senior official appointed by the Director, Emergency Action and Coordination Team (EACT), with the advice of the Manager, Albuquerque Operations Office (AL), responsible for all DOE field operations for responding to a nuclear weapon accident or significant incident. (5530.1); 3: A DOE senior official who is responsible for all DOE field operations involved in responding to a nuclear weapon accident or significant incident in which the Department of Defense is the Cognizant Federal Agency and a military person is the Onscene Commander. (5500.1A, Change 1)

DOE travel board

Consists of the Assistant Secretary, Management and Administration (MA-1), and the Assistant Secretary for International Affairs and Energy Emergencies (IE-1) who by direction of the Under Secretary review DOE travel to ensure that travel is conducted in a cost-effective and efficient manner. (1500.3)

Dose terms

1: Dose terms:

- (a) **Absorbed dose** The energy imparted to matter by ionizing radiation per unit mass of irradiated material at the place of interest in that material. The absorbed dose is expressed in units of rad (or gray). (1 rad = 0.01 gray.)
- (b) **Deep dose equivalent** As used in this Order, means the dose equivalent in tissue at a depth of 1 cm deriving from external (penetrating) radiation.
- (c) **Dose equivalent** The product of absorbed dose in rad (or gray) in tissue and a quality factor. Dose equivalent is expressed in units of rem (or sievert) (1 rem = 0.001 sievert). For purposes of this Order, the dose equivalent to an organ, tissue, or whole body in a year will be that received from the direct exposure plus the 50-year committed dose equivalent received from radionuclides taken into the body during the year.
- (d) **Effective dose equivalent** The summation of the products of the dose equivalent received by specified tissues of the body and a tissue-specific weighting factor. This sum is a risk-equivalent value and can be used to estimate the health-effects risk of the exposed individual. The tissue-specific weighting factor represents the fraction of the total health risk resulting from uniform whole-body irradiation that would be contributed by that particular tissue. The effective dose equivalent includes the committed effective dose equivalent from internal deposition of radionuclides and that due to penetrating radiation from sources external to the body. Effective dose equivalent is expressed in units of rem (or sievert).

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Dose terms

Dose terms (continued)

- (e) **Public dose** Means the dose received by member(s) of the public from exposure to radiation and to radioactive material released by a DOE facility or operation, whether the exposure is within a DOE site boundary or off-site. It does not include dose received from occupational exposures, doses received from naturally occurring "background" radiation, doses received as a patient from medical practices, or doses received from consumer products.
- (f) **Weighting factor** Tissue-specific and represents the fraction of the total health risk resulting from uniform whole-body irradiation that could be contributed to that particular tissue. The weighting factors recommended by the ICRP (Publication 26) and used here are:

<u>Organ or Tissue</u>	<u>Weighting Factor</u>
Gonads	0.25
Breasts	0.15
Red Bone Marrow	0.12
Lungs	0.12
Thyroid	0.03
Bone Surfaces	0.03
Remainder ¹	0.30

¹"Remainder" means the five other organs with the highest dose (e.g., liver, kidney, spleen, thymus, adrenals, pancreas, stomach, small intestine, or upper and lower large intestine, but excluding skin, lens of the eye, and extremities). The weighting factor for each of these organs is 0.06.

- (g) **Committed dose equivalent** The predicted total dose equivalent to a tissue or organ over a 50-year period after a known intake of a radionuclide into the body. It does not include contributions from external dose. Committed dose equivalent is expressed in units of rem (or sievert).

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Dose terms (continued)

- (h) **Committed effective dose equivalent** The sum of the committed dose equivalents to various tissues in the body, each multiplied by the appropriate weighting factor. Committed effective dose equivalent is expressed in units of rem (or sievert).
- (i) **Collective dose equivalent and collective effective dose equivalent** The sums of the dose equivalents or effective dose equivalents of all individuals in an exposed population within an 80-km radius, for the purposes of this Order, and they are expressed in units of person-rem (or person-sievert). When the collective dose equivalent of interest is for a specific organ, the units would be organ-rem (or organ-sievert). For purposes of this Order, the 80-km distance shall be measured from a point located centrally with respect to major facilities or DOE program activities.
- (j) **Quality factor** The principal modifying factor used to calculate the dose equivalent from the absorbed dose. For the purposes of this Order, the following quality factors, which are taken from DOE 5480.11, are to be used:

<u>Radiation Type</u>	<u>Quality Factor</u>
X-rays, gamma rays, positrons, and electrons (including tritium)	1
Neutrons, < 10 key	3
Neutrons, > 10 key Protons and single charged particles of unknown energy with rest mass > one atomic mass unit	10
Alpha particles multiple-charged particles (and particles of unknown charge) of unknown energy	20

For neutrons of known energies, the more detailed quality factors given in DOE 5480.11 may be used.

(5400.XX) (5400.5, Change 1);

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Dose terms

Dose terms (continued)

2: Dose terms:

- (a) **Absorbed dose** The energy imparted to matter by ionizing radiation per unit mass of irradiated material at the place of interest in that material. The absorbed dose is expressed in units of rad (or gray). (1 rad = 0.01 gray.)
- (b) **Dose equivalent (H)** The product of absorbed dose (D) in rads (or gray) in tissue, and a quality factor (Q), and other modifying factors (N). Dose equivalent (H) is expressed in units or rem (or sievert).
- (c) **Annual dose equivalent** The dose equivalent received in a year. Annual dose equivalent is expressed in units or rem (or sievert).
- (d) **Shallow, deep, and lens of eye dose equivalent** The dose equivalent at the respective depths of 0.007 cm, 1.0 cm and 0.3 cm in tissue.
- (e) **Effective dose equivalent (H_E)** The sum over specified tissues of the products of the dose equivalent in a tissue (H_T) and the weighing factor (W_T) for that tissue, i.e., $H_E = \sum W_T H_T$. The effective dose equivalent is expressed in units of rem (or sievert).
- (f) **Annual effective dose equivalent** The effective dose equivalent received in a year. The annual effective dose equivalent is expressed in units of rem (or sievert).
- (g) **Committed dose equivalent** The calculated dose equivalent to be received by a tissue or organ over a 50-year period after an intake of a radionuclide into the body. It does not include contributions from external dose. Committed dose equivalent is expressed in units of rem (or sievert).
- (h) **Committed effective dose equivalent ($H_{E,50}$)** The sum of the committed dose equivalents to various tissues in the body, each multiplied by its weighing factor. It does not include contributions from external dose. Committed effective dose equivalent is expressed in units or rem (or sievert).

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Dose terms (continued)

- (i) **Collective dose equivalent** The sum of the dose equivalents of all individuals in an exposed population. Collective dose equivalent is expressed in units of person-rem (or person-sievert).
- (j) **Collective effective dose equivalent** The sum of the effective dose equivalents of all individuals in an exposed population. Collective effective dose equivalent is expressed in units of person-rem (or person-sievert).
- (k) **Cumulative annual effective dose equivalent** The sum of the annual effective dose equivalents recorded for an individual for each year of employment at a DOE or DOE contractor facility since the effective date of this Order.
- (l) **Weighting Factor (W_T)** Used in the calculation of annual and committed effective dose equivalent to equate the risk arising from the irradiation of tissue T to the total risk when the whole body is uniformly irradiated. The weighing factors as defined in ICRP Publication 26 and NCRP Report 91 are:

<u>Organs or Tissues</u>	<u>Weighting Factor</u>
Gonads	0.25
Breasts	0.15
Red Bone Marrow	0.12
Lungs	0.12
Thyroid	0.03
Bone Surfaces	0.03
Remainder ¹	0.30

¹Remainder means the five other organs or tissue with the highest dose (e.g., liver, kidney, spleen, thymus, adrenal, pancreas, stomach, small intestine, upper large intestine or lower large intestine). The weighing factor for each remainder organ or tissue is 0.06. The extremities, skin, and lens of the eye are excluded from the remainder organs or tissue for assessment of effective dose equivalent.

(5480.11, Change 1)

DOT exemption**DOT exemption**

A document providing approval by the DOT of relief from one or more provisions of the DOT Regulations (49 CFR). (5480.3A)

DOT specification packaging

General packaging designed to meet requirements established by DOT for hazardous materials. (1540.2, Change 1)

Downgrading

Lowering the classification level of information, documents, or material. (Does not include declassification.) (5635.1A)

Drug certification

A written assurance signed by an individual stating the person will refrain from using or being involved with illegal drugs while employed in a position requiring DOE access authorization. (5631.2B)

Dry firing

A training procedure to improve proficiency that uses a weapon without blank or live ammunition. (5480.16, Change 2)

Dud

A bomb, grenade, or shell that fails to explode. (5480.16, Change 2)

Due date

The date on which payment should be made. (2200.4)

Due process

In the employees relations context is the basic protection of a employee's constitutional and statutory rights through established procedures that ensure proper and fair administration of justice. In the drug testing context, "due process" would include, for example, procedures that would allow the employee to know of charges against him or her; that would allow the employee to respond to the charges and that allow for employee appeals of subsequent decisions. These "due process" procedures are fully described in DOE 3750.1; the term "due process" is simply a brief way of referring to those procedures. (3792.3)

DX

Duress system

A system that can covertly communicate a situation of duress to a security control center or other personnel who can notify a security control center.
(6430.1A) (5632.1A)

DX

The rating symbol assigned only to authorized programs of the highest national priority. (5560.1A)

DOE ORDER DEFINITIONS

E

Early payment

Any payment made 3 days or more before the due date or the last day of the discount period. (2200.4)

Earned leave

Leave accrued during the current leave year, leave carried over from the previous leave year, and leave restored to a separate leave account. (3630.2)

Earned value

The periodic, consistent measurement of work performed in terms of the budget assigned to that work. In criteria terminology, earned value is the budgeted cost for work performed. It is compared to the budgeted cost for work scheduled (planned) to obtain an indication of schedule performance, and it is compared to the actual cost of work performed to obtain cost performance. (2250.1C)

Earth-lined channel

An open channel conveyance structure with sides and bottom constructed of naturally occurring earth materials. (6430.1A)

Easement

The right to use land belonging to another for a specific purpose, with the owner retaining title. The owner's use is restricted to activities that will not interfere with the purposes for which the easement was granted. (4300.1B)

Eavesdropping

Interception, through use of electronic equipment, of a conversation involving one or more individuals without the knowledge of at least one of the participants. (5636.1)

Economically justified

The most cost-effective alternative based on a life cycle cost analysis as determined by procedures set forth in 10 Code of Federal Regulations (CFR) 436, subpart A. (4330.2C)

Economic analysis

Economic analysis

A systematic approach to evaluating the relative worth of alternative ways to reaching an objective for a proposed project. The economic analysis is used to examine and relate the costs, benefits, and uncertainties of each alternative in order to determine the most cost-effective means. (1360.1A)

Economic escalation

Cost increase associated with unit price increase. Whereas the cost of projects can increase because of poor management, scope growth, and schedule delays, this Order is concerned only with forecasting price increases caused by general or specific dollar devaluation. This is historically caused largely by an increase in the amount of currency in circulation relative to the goods and services available. (5700.2C)

Edition date

The date of issue for a form. The edition date shall be changed with each revision of the form. (1322.2B)

EEMT member

The EEMT is composed of individuals appointed by their respective DOE offices who are knowledgeable in their policy areas, and who are empowered to speak for and commit resources of their respective organizations. (5500.8)

Effective dose equivalent

1: The dose equivalent from both external and internal irradiation defined by $\sum_T W_T H_T$ where H_T is the dose equivalent in tissue T and W_T is the weighing factor representing the ratio of the risk arising from irradiation of tissue T to the total risk when the whole body is irradiated uniformly. The effective dose equivalent is expressed in units of rem. (6430.1A); 2: (H_E or EDE) is the summation of the products of the dose equivalent received by specified tissues of the body and a tissue-specific weighing factor. This sum is a risk-equivalent value and can be used to estimate the health-effects risk of the exposed individual. The tissue-specific weighing factor represents the fraction of the total health risk resulting from uniform whole-body irradiation that would be contributed by that particular tissue. The effective dose equivalent includes the committed effective dose equivalent from internal deposition of radionuclides and the effective dose equivalent due to penetrating radiation from sources external to the body; it is expressed in units of rem (or sievert). (5400.XY)

Effective kilogram

1: A special unit for quantities of nuclear material defined under the agreement as:

- (a) for plutonium, its weight in kilograms;
- (b) for uranium with an enrichment of 0.01 (1 percent) and above, its weight in kilograms multiplied by the square of its enrichment;
- (c) for uranium with an enrichment below 0.01 (1 percent) and above 0.005 (0.5 percent), its weight in kilograms multiplied by 0.0001;
- (d) for depleted uranium with an enrichment of 0.005 (0.5 percent) or below, and for thorium, its weight in kilograms multiplied by 0.00005.

(1270.2A); 2: A unit used in safeguarding nuclear material.

(a) An effective kilogram of special nuclear material means:

- (1) for plutonium and uranium-233, their weight in kilograms;
- (2) for uranium with an enrichment in the isotope U-235 of 0.01 (1 percent) and above, its element weight in kilograms multiplied by the square of its enrichment expressed as a decimal weight fraction; and
- (3) for uranium with an enrichment in the isotope U-235 of below 0.01 (1 percent), its element weight in kilograms multiplied by 0.0001;

(b) An effective kilogram of source material means:

- (1) for uranium with a U-235 isotopic content greater than 0.005 (0.5 percent) of total uranium present, 10,000 kilograms; and
- (2) for any other source material, 20,000 kilograms.

(5633.5)

Effluent

1: Treated wastewater or airborne emissions discharged into the environment. (6430.1A); 2: Any treated or untreated air emission or liquid discharge at a DOE site or from a DOE facility. (5400.1, Change 1) (5400.XY)

Effluent monitoring

Effluent monitoring

1: The collection and analysis of samples, or measurements of liquid and gaseous effluents for the purpose of characterizing and quantifying contaminants, assessing radiation exposures of members of the public, providing a means to control effluents at or near the point of discharge, and demonstrating compliance with applicable standards and permit requirements. (5400.1, Change 1) (5400.5); 2: The collection and analysis of samples or measurements of liquid, gaseous, or airborne effluents for the purpose of characterizing and quantifying contaminants and process stream characteristics, assessing radiation exposures to members of the public, and demonstrating compliance with applicable standards. (5400.XY)

Egress

The act of departing from a point of access. (6430.1A)

ElectroExplosive Device (EED)

A device containing some reaction mixture (explosive or pyrotechnic) that is electrically initiated. The output of the initiation is heat, shock, or mechanical action. (6430.1A)

Electronic media

Any type of automated office electronic record recording medium such as disk, diskette, tape, and tape cartridges. A fixed (non-removable) disk is included. Disposition of the records on a fixed disk is made by copying the records, an exception being destruction of the records. Destruction, however, is only one aspect of records disposition. (1324.6)

Electronic records

Records created, stored, or transmitted using personal computers, word processors, and associated electronic office equipment. (1324.2A)

Eligible contracts and orders

Those contracts and orders for products, materials, and services which may be rated in accordance with the rules and exclusions stated in the defense priorities and allocations system regulation and in the Defense Priorities and Allocations System Delegation 2. Exclusions are specified in the regulation in paragraph 350.18(b)(1) and (3) and in the delegation of authority in Attachment A to the Statement of Conditions. (5560.1A)

"E" material

Unusable excess nuclear material for which DP-13 has management responsibility. Generally, "E" Material consists of (a) economically recoverable unirradiated scrap nuclear material declared to a Central Scrap Management Office, or (b) spent fuel which is not budgeted for recovery. The program organization responsible for holding the material at the time that the "E" project number is assigned is responsible for safe storage and all preparation, handling, packaging, and shipping charges associated with its eventual disposition. (5660.1)

Embossing seal

A display of the form and content of the official seal made on a die so that the seal can be embossed on paper or other medium. (1000.2)

Emergency

1: Any significant deviation from planned or expected behavior or course of events which could endanger or adversely affect people, property, or the environment. (5500.3, Change 1); 2: Any significant event involving DOE operations and activities that presents a potential risk to life, health, property, or the environment.

- (a) **Operational emergency** A significant event involving DOE operations and activities that presents a potential risk to life, health, property, or the environment.
- (1) **Nuclear weapons accidents or significant incident** An unexpected event involving nuclear weapons or actual components of nuclear weapons that results in any of the following:
 - (a) accidental or unauthorized arming, launching, firing, or use of a nuclear explosive;
 - (b) nuclear detonation;
 - (c) nonnuclear detonation/burning of a nuclear weapon.
 - (d) radioactive contamination;
 - (e) seizure, theft, or loss of a nuclear weapon or an actual component of a nuclear weapon;
 - (f) public hazard, actual or implied.

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Emergency

Emergency (continued)

- (2) **Hazardous materials emergency** A condition or potential condition that could result in the accidental release or loss of control of radioactive or toxic material.
- (3) **Natural phenomena emergency** A condition caused by flood, earthquake, fire, storm, or other natural occurrences.
- (4) **Safeguards and security emergency** A condition in which there is a potential or actual malevolent act that creates or appears likely to create a condition resulting in sabotage, bodily harm, unlawful access to DOE or DOE contractor facilities, or the interruption or loss of vital services.

Also included are special nuclear materials emergencies in which there is a situation involving stolen, lost, or unauthorized possession of source material, special nuclear material, byproduct material of U.S. and/or foreign manufacture, improvised nuclear explosive, or radioactive dispersal devices or the threatened use of said items.

- (b) **Continuity of government emergency** A condition caused by the domestic or enemy attack involving a national security threat to the continuity of the Federal Government.
- (c) **Energy emergency** A condition or potential condition affecting the supply of energy or the energy infrastructure with significant potential impact on the national economy, national security, defense preparedness, or health and safety.

(5500.1A, Change 1)

Emergency Action and Coordination Team (EACT)

A Headquarters team designated to coordinate response to emergencies involving DOE or requiring DOE assistance. (5500.3, Change 1) (5530.1) (5500.4)

Emergency Management System (EMS)

Emergency Control Centers (ECC)

A facility from which designated management personnel can assume immediate direction of the response to an emergency. The ECC may be an office, a conference room, or other predestinated location having appropriate communications and informational materials to carry on the necessary supportive functions of directing an emergency response. (5500.3, Change 1) (6430.1A)

Emergency Control Station (ECS)

A location within or near a designated critical facility or plant area for the purpose of maintaining control, orderly shutdown, and/or surveillance of operations and equipment during an emergency. (6430.1A) (5500.1A, Change 1)

Emergency equipment

Any equipment that may be required to measure, control, or mitigate the consequences of, or in any way be involved in, an emergency. (5500.1A, Change 1) (5500.3, Change 1)

Emergency Management Coordination Committee (EMCC)

A group of senior-level representatives from appropriate organizations who collectively provide executive oversight and coordination of the Emergency Management system. The EMCC is chaired by the Under Secretary. (5500.8) (5500.1A, Change 1)

Emergency Management System (EMS)

1: A Departmental program for the development, coordination, and direction of emergency planning, preparedness, response, and readiness assurance. (5500.8); 2: A Departmental program for the development, coordination, and direction of emergency planning, preparedness, response, and readiness assurance.

- (a) **Planning** The development and preparation of emergency plans and procedures and the determination of availability of resources to provide an effective response.
- (b) **Preparedness** The training of personnel, acquisition of resources and facilities, testing of emergency plans and procedures to ensure an effective response.

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Emergency Management System (EMS)

Emergency Management System (EMS) (continued)

- (c) **Response** The action(s) taken to cope with and minimize the effects of any emergency.
- (d) **Readiness Assurance** The actions taken to provide assurance that Headquarters, field elements, and facility contractors implement appropriate aspects of DOE emergency management program policies and requirements as established by DOE Orders.

(5500.1A, Change 1)

Emergency Management Team

A DOE team designated to manage activities during emergencies involving DOE or requiring DOE assistance. (5500.1A, Change 1)

Emergency operating records

Records vital to the essential functions of the Federal Government for the duration of an emergency resulting from an attack on the country. These records include those necessary for the military effort; the mobilization and protection of material and manpower resources, of services, and systems; the maintenance of public health, safety, and order; and the conduct of essential civil defense activities. These records must be available as needed at, or in the vicinity of, Emergency Operations Centers. Examples of emergency operating records are:

- (a) **General management records** Statements of mission; plans and programs for carrying out that mission; delegations of authority; successions of command; regulations or announcements drafted for emergency purposes; outlines of action programs; listings of emergency operating and rights and interest records storage locations; listings of Department personnel, property, and activities sufficient to provide a basis for damage assessments; descriptions of essential emergency functions; and copies of basic legislation, regulations, and procedures.

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Emergency operating records (continued)

- (b) **Lists of key personnel** Includes lists of employees assigned emergency duties and lists of employees with skills useful during and subsequent to an emergency. If the lists, or other information, are retrievable by a name or individual or other personal identifier, such as social security number, the information is subject to the Privacy Act of 1974, 5 U.S.C. 552(a).
- (c) **Emergency missions records** Departmental emergency mission records, determined by the relationship of the record to the assigned essential continuity of Government function.
- (d) **Industrial records** Engineering drawings, explanations of complex industrial processes, and lists of supplies and suppliers for items and materials not readily available.

(5500.7B)

Emergency Operations Center (EOC)

1: An emergency operations center is an alternate (to the ECC), where possible in a secure, and protected location, designed and equipped to support a cadre of management and supporting personnel that will direct DOE field organizations necessary to carry out assigned essential major emergency responsibilities. (5500.3, Change 1); 2: A facility from which management and support personnel carry out emergency response activities. (5500.8); 3: An alternate control center at a secure and protected location (where possible), designed and equipped to support a cadre of management and supporting personnel, who will direct DOE field-organization operations necessary to carry out assigned, essential, major-emergency responsibilities. (6430.1A); 4: A facility from which management and support personnel carry out emergency response activities. The emergency operations center may be a dedicated facility or office, conference room, or other predesignated location having appropriate communications and informational materials to carry out the assigned emergency response mission, and located where possible in a secure and protected location. (5500.1A, Change 1)

Emergency plan

A brief, clear, and concise document which describes the overall emergency organization, designates responsibilities, and describes the procedures, including notifications, involved in coping with potential credible emergencies. (5500.3, Change 1) (5500.1A, Change 1)

Emergency planning preparedness and response program

Emergency planning preparedness and response program

An emergency program consisting of the following parts:

- (a) **Planning** The development and preparation of emergency plans and procedure and the determination of availability of resources to provide an effective response.
- (b) **Preparedness** The training of personnel, acquisition of resources and facilities, and exercising of emergency plans and procedures to assure an effective response.
- (c) **Response** The action(s) taken to cope with and minimize the effects of an emergency.

(5500.3, Change 1)

Emergency planning zone

An area for which planning is done to ensure that prompt and effective actions can be taken to protect the environment and the health and safety of on-site personnel and the public in the event of a major emergency. (6430.1A)

(5500.1A, Change 1)

Emergency Planning Zones (EPZs)

Areas for which planning is done to assure that prompt and effective actions can be taken to protect onsite personnel, the public health and safety, and the environment in the event of a radiological emergency. (5500.3, Change 1)

Emergency power

DBA-qualified and seismic Category-I-qualified, fully redundant power generation, switching, and distribution system that meets the IEEE 1E criteria. It is designed to activate on loss of the normal power supply (or in the case of UPS systems, be on-line) and is used to supply SC-1 items, components, and/or systems with power to allow them to maintain their safety class functions. (6430.1A)

Emergency power systems

The auxiliary power systems that provide power to safety and security related equipment during periods of partial or total power failure of associated primary power system. (6430.1A)

Emergency telecommunications services

Emergency procedure

Detailed instructions and guidance for carrying out emergency response actions. (5500.3, Change 1) (5500.1A, Change 1)

Emergency resources

Any individual or group of individuals, items of equipment or instrumentation, and specialized services which have been assembled, organized, or developed for the purpose of assisting in alleviating the consequences of an emergency. (5500.1A, Change 1) (5500.3, Change 1)

Emergency response levels

A method of classifying potential and actual emergencies into four degrees of increasing severity which are characterized by specific abnormal facility operating conditions or radiological releases. Declaration of a specific emergency response level initiates a predetermined level of DOE and offsite personnel response. (5500.3, Change 1)

Emergency telecommunications services

- (a) Telecommunications services directly supporting Federal Government activity responding to a Presidentially declared disaster or emergency as defined in the Disaster Relief Act (42 U.S. Code Sec. 5122); and
- (b) telecommunications services directly resulting from any of the following circumstances:
 - (1) state of crisis declared by the national command authorities;
 - (2) efforts to protect endangered U.S. personnel or property;
 - (3) enemy action, civil disturbance, natural disaster, or any other unpredictable occurrence that has damaged facilities whose uninterrupted operation is essential to national security emergency preparedness or the management of other ongoing crises;

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Emergency telecommunications services

Emergency telecommunications services (continued)

- (4) certification by the head or director of a Federal agency, commander of a unified/specified command, chief of a military service, or commander or major chief of a military command that a telecommunications service is so critical to protection of life and property or to the national security that it must be processed immediately.

(5500.1A, Change 1)

Eminent domain

The right of the Government to take private property for public use. (4300.1B)

Emission

See Effluent. (5400.XY)

Emission security

The component of communications security that results from all measures taken to deny unauthorized persons information of value that might be derived from intercept and analysis of compromising emanations from crypto-equipment, telecommunications, systems, and other classified information processing equipment. (5300.2C) (5300.4B)

Employee

1: Any officer or employee of DOE as defined in title 5, U.S.C., sections 2104 and 2105. (3792.3); 2: An individual currently employed in a Federal agency including a current member of the Armed Forces or a Reserve of the Armed Forces. (2200.2A)

Employee Assistance Program (EAP)

A system of employer-provided services to provide prevention, treatment and rehabilitation assistance to employees who have substance abuse and other medical behavioral problems. For the purpose of this Order, an EAP will, at a minimum, provide employee counseling and referral for rehabilitation with regard to substance abuse. (3220)

Employee benefit funds

Deposits with contractors for the purpose of providing funds for payments to contractors' employees suffering disabilities from certain specified causes. (2200.4)

Energy conservation coordinator

Employee representative

Representatives of employee groups, such as labor organizations recognized as such by the Department, who are elected or appointed to represent employees. Where an employee group is not officially represented by a recognized labor organization, a nonsupervisory member of that group may be elected by the employees to be the occupational safety and health representative. (3790.1A)

Employees

Includes former DOE employees who meet the time limits for presenting a grievance and for whom a remedy can be granted. In Chapter III, this definition means employees who are in grades 13 through 15 only. (3771.1, Change 1)

Encasement, concrete

Placement of concrete around a sewer at its point of intersection with a potable water line to provide a leakage barrier. (6430.1A)

Enclosure

A primary confinement system such as process systems, glove boxes, conveyors, hot cells, and canyons. (6430.1A)

Encumbrance

A claim against property, such as an easement or a mortgage, which prevents transfer of ownership free and clear of any claims; however, it may be transferred or sold to another, subject to the outstanding claim or claims. (4300.1B)

Ending inventory

The quantity of nuclear materials on hand at the end of an accounting period. (5633.3, Change 1)

Energy conservation coordinator

A field designee who is typically responsible for: development of 10-year energy management plans; identification of potential energy conservation surveys and retrofit projects; coordination of information for established reporting requirements; and performing other duties established in the field for development and implementation of the energy management and conservation program and plans. (4330.2C)

Energy data base

Energy data base

An information file that contains over 700,000 scientific and technical information citations and is used by DOE organizations and contractors carrying out their assigned missions. All unclassified scientific and technical information processed at the Technical Information Center, as well as information from sources throughout the industrialized world, can be found in this data base. First priority is given to entering DOE-sponsored research and development results, but the file also includes journal articles, reports, conference proceedings, patents, books, monographs, theses, and engineering materials, all of which are abstracted and indexed for inclusion in the data base. Coverage includes all forms of energy. The data base is updated twice a month, and over 150,000 new citations are added each year. (1340.1A)

Energy emergency

Any significant deviation from planned or expected behavior or course of events that could endanger or adversely affect people, property, or the environment (but excluding the internal operations of the Power Marketing Administrations (PMA's). Energy emergencies encompass, but are not limited to, the following:

- (a) supply crises due to international political causes (e.g., embargo);
- (b) supply crises due to defense mobilization;
- (c) supply crises due to natural disasters;
- (d) supply crises due to energy system sabotage;
- (e) supply crises due to major accidents involving energy systems;
and
- (f) supply crises due to labor strikes or lock outs.

(5500.8)

Energy Emergency Management Systems (EEMS)

The Energy Emergency Management System (EEMS) is the component of DOE's Emergency Management System (EMS), which defines the functional requirements of energy emergency management responsibilities assigned to the Office of International Affairs and Energy Emergencies (IE). (5500.8)

Energy Management Plan

Energy Emergency Management Team (EEMT)

1: Established in accordance with DOE 5500.1A to manage and coordinate energy emergency responses. The EEMT is composed of pre-designated DOE individuals and chaired by the Deputy Assistant Secretary for Energy Emergencies (IE-20). The EEMT is activated at the outset of an energy emergency and serves as the focal point for the development and coordination of energy emergency management activities. (5500.8); 2: A DOE team predesignated to coordinate response to energy emergencies involving DOE or requiring DOE assistance. (5500.1A, Change 1)

Energy functional group

This group represents DOE and the Nuclear Regulatory Commission on the National Emergency Management Team (NEMT) and the Regional Emergency Management Teams (REMTs). During a national security emergency, this group manages and allocates energy resources, claims resources required to provide/deliver energy, and exercises the obligated authorities of the Secretary of Energy and the Nuclear Regulatory Commission. (5500.9)

Energy information

Includes "(a) all information in whatever form on (i) fuel reserves, exploration, extraction, and energy resources (including petrochemical feedstocks) wherever located; (ii) production, distribution, and consumption of energy and fuel wherever carried on; and (b) matters relating to energy and fuels, such as corporate structure and proprietary relationships, costs, prices, capital investment, and assets, and other matters directly related thereto, wherever they exist." Definition is from Section 11 of Energy Supply and Environmental Coordination Act of 1974. (1322.2B) (5900.1)

Energy library

The Department's technical library located at DOE Headquarters which represents the Department on issues dealing with libraries or library services. (1430.4)

Energy Management Plan

The method of carrying out an energy management program; also, the document(s) defining and describing an energy management program. The DOE 10-year Energy Management Plan defines DOE-wide policy and goals, and coordinates and provides the program approach for the energy management plans of field elements. (4330.2C)

Energy management system

Energy management system

An automated system for monitoring and controlling energy-related systems and devices. (6430.1A)

Energy monitoring and control system

See Energy management system. (6430.1A)

Engagement Simulation System (ESS)

ESS has three elements: (a) devices that provide weapon effects; (b) a control system; (c) a training support package. (5480.16, Change 2)

Engineered barrier

A man-made structure or device that is intended to improve the performance of a disposal facility. (5820.2A)

Engineered Safety Feature (ESF)

Systems or design characteristics that are provided to prevent or mitigate the potential consequences of postulated design basis accidents. An engineered-safety-feature system is a safety class system. (6430.1A)

Enriched uranium

Uranium which contains more of the fissionable isotope uranium-235 than the naturally occurring fraction, which is 0.00711 by weight. (5633.3, Change 1)

Entrance conference

A formal introductory conference at which the IG staff provides the program/operation being audited with basic information such as the reason of the audit (where appropriate), and the audit scope, objectives, and approach and establishes a line of communication with the program/operation officials. (2320.2A)

Entry control point

Controlled access entry point to a site or a secured area. (6430.1A)

Entry level

The condition that exists when a person is first assigned the duties and responsibilities to perform a job or task. (5632.1A)

Environmental audit

A documented assessment of a facility to monitor the progress of necessary corrective actions, to assure compliance with environmental laws and regulations, and to evaluate field organization practices and procedures. (5482.1B) (5480.1B)

Environmental detection limit

The smallest level at which a radionuclide in an environmental medium can be unambiguously distinguished for a given confidence level using a particular combination of sampling and measurement procedures, sample volume, analytical detection limit, and processing procedure. (5400.XY)

Environmental medium

A discrete portion of the total environment, animate or inanimate, that may be sampled or measured directly. (5400.XY)

Environmental monitoring

The collection and analysis of samples or direct measurements of environmental media. Environmental monitoring consists of two major activities: effluent monitoring and environmental surveillance. (5400.1, Change 1)

Environmental occurrence

Any sudden or sustained deviation from a regulated or planned performance at a DOE operation that has environmental protection and compliance significance. (5400.1, Change 1)

Environmental protection standard

A specified set of rules or conditions concerned with: delineation of procedures; definition of terms; specification of performance, design, or operations; or measurements that define the quantity of emissions, discharges, or releases to the environment and the quality of the environment. (5400.1, Change 1)

Environmental surveillance

1: The collection and analysis of samples, or direct measurements, of air, water, soil, foodstuff, biota, and other media from DOE sites and their environs for the purpose of determining compliance with applicable standards and permit requirements, assessing radiation exposures of members of the public and assessing the effects, if any, on the local environment. (5400.1, Change 1) (5400.5, Change 1);

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Environmental surveillance

Environmental surveillance (continued)

2: The collection and analysis of samples of air, water, soil, foodstuffs, biota, and other media from DOE sites and their environs and the measurement of external radiation for purposes of demonstrating compliance with applicable standards, assessing radiation exposures to members of the public, and assessing effects, if any, on the local environment. (5400.XY, Change 1)

Environmental survey

A documented, multidiscipline assessment (with sampling and analysis) of a facility to determine environmental conditions and to identify environmental problem areas of environmental risk requiring corrective action. (5482.1B)
(5480.1B)

Environment, safety, and health overview

An organized set of activities performed as independent functions. Its purpose is to assure that all aspects of environment, safety and health-related activities at the program, project, and contractor level are adequately addressed. Such activities include:

- (a) establishing Department-wide environment, safety, and health policies, requirements and standards;
- (b) periodic and timely reviews of program and project documents, activities, actions, and plans;
- (c) appraising the implementation of environment, safety and health programs at the Headquarters, field, and contractor level as appropriate; and
- (d) providing support, assistance, and guidance to Headquarters program offices and field organizations.

(5480.1B)

Environment, Safety, and Health (ES&H) program

Encompasses those DOE requirements, activities, and functions in the conduct of all DOE and DOE-controlled operations that are concerned with: controlling air, water, and soil pollution; limiting the risks to the well being of both operating personnel and the general public to acceptably low levels; and protecting property adequately against accidental loss and damage. Typical activities and functions related to this program include, but are not limited to, the following: environmental protection, occupational safety, fire protection, industrial hygiene, health physics, occupational medicine, process and facilities safety, nuclear safety, emergency preparedness, quality assurance, and radioactive and hazardous waste management. (5482.1B) (5480.1B) (5480.XX)

Enviorns

The environment surrounding a facility or site. (5400.XY)

Equal opportunity clause

Provisions covering non-discrimination and affirmative action requirements for Government contracts contained in FPR-1-12.8 and required to be part of all Federal contracts covered by Executive Order 11246. (3220.2)

Equipment

The systems and devices used throughout DOE, and commonly referred to as equipment, are divided into three categories in order to provide a uniform basis for analysis of maintenance and repair costs.

- (a) **Installed Equipment** Includes systems installed as a part of basic building construction and are essential to normal functioning of a building space. Plumbing, electrical, and mechanical systems are examples.
- (b) **Programmatic Equipment** Includes that used purely for programmatic purposes, e.g. manufacturing, reactors, or accelerator machinery, or chemical processing lines, and items of similar nature.
- (c) **Other** Includes all equipment not covered in (a) and (b) above.

(4330.4)

Equipment holdup

Equipment holdup

The amount of nuclear material remaining in process equipment and facilities after the in-process material, stored materials, and product have been removed. Estimates or measured values of materials in holdup may be reflected in the facility's inventory records. (5633.3, Change 1)

Equivalent protection

Those alternate measures which will achieve a level of safety at least equal to that specified in the regulations from which the alternative is sought, will be consistent with the public intent, and will provide adequate protection against the risks to life and property. (1540.2, Change 1)

Equivalent safety protection

Providing a level of protection to the public, workers, and environment that is equal to or greater than that provided by full compliance with the regulations. Equivalence is certified by the approval by the Head of a Field Element of the Onsite Transportation Safety Manual, which contains all supporting safety documentation. (5480.3A)

Error

1: The difference between an observed or measured value and its true value. (5400.XY); 2: A deviation from correctness. (5633.3); 3: An act or condition of unknowing deviation from generally accepted management or accounting practices. (2300.1A)

Escort

A duty performed by a Department or Departmental contractor or common carrier employee specifically responsible for the delivery of a security shipment. Escorts may include protective personnel, truck drivers, and other attendants furnished by the department, departmental contractors, or common to accompany another person, vehicles, items, or product. (5632.1A)

ESS blanks

Blank cartridges that are used in ESS equipment; including ordinary blank cartridges and special charges (e.g., LAW simulator charges). (5480.16, Change 2)

Essentiality rating

An importance-time-related designation assigned to a computer application that indicates when an application must be back in operation to avoid mission impacts after a disaster or interruption in computer support services at a multiuser installation. To facilitate prioritized recovery procedures and for operating at offsite backup facilities in a degraded mode (i.e., only most essential applications), computer applications should be assigned essentiality ratings of varying importance (e.g., most essential, essential, important, deferrable). Applications with the same essentiality rating (i.e., most essential) should be additionally ranked (e.g., numerically) according to installation or site determined processing priorities and perceptions of importance. (1360.2A)

Established standards of behavior

The usual and customary ways individuals perform their personal, social, and work activities in a manner that is constructive and which is generally recognized as compatible with society's view of what is appropriate behavior. (5480.YY)

Estimate

A technically defensible approximation of the quantity of SNM based on process parameters and/or material attributes. An estimate is used when a direct measurement of SNM amount is not possible. (5633.3, Change 1)

Evaluations

1: Assessments of the effectiveness of protection program topical areas as implemented across the DOE. Evaluations will be based on data obtained in the field during inspection and evaluation (I&E) activities but, since they are not specific to any particular operations office, may be referred to as "horizontal." Evaluation results are analyzed and documented but are not rated. (5630.12);
2: Determinations of the effectiveness of protection program topical areas as implemented across the DOE. (5630.13)

Event

A real-time occurrence—e.g., pipe break, valve failure, loss of power, etc. (5000.3A)

Exception

1: An interim release from a DOE-prescribed OSHA standard, granted after a request for a temporary or permanent variance. Exceptions shall not exceed 180 days and are not renewable. (5483.1A);

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Exception

Exception (continued)

2: An interim release from a standard of the type specified under the Occupational Safety and Health Act. An exception is processed in accordance with DOE 5483.1A. (5480.1B); 3: GSA approval for an agency to change the content, format, or printing specifications of a Standard or Optional form. Content exceptions apply to Standard Forms only; whereas, format and printing exceptions apply to both Standard and Optional Forms. (1322.2B); 4: A release from the requirements of this Order for a training program within an accreditable facility. Exception also refers to an individual who is released from portions of a training program by testing. (5480.18); 5: A permanent exclusion from a specific requirement granted on a case-by-case basis because it may be impossible, highly impractical, not cost effective, or unnecessary due to existing measures or standard already exceeding the prescribed requirement. (5635.1A); 6: An approved alternate means of providing adequate protection. There are two categories of exceptions.

- (a) Affecting the security of category II (or greater) quantities of SNM and/or materials, facilities, or operations covered by the classified threat guidance issued by DP-1. These exceptions are developed by the Heads of Field Elements and submitted in writing to DP-34 for review and concurrence prior to implementation. Written records of such exceptions are included in the appropriate site-specific safeguards and security plan(s) and/or Master Safeguards and Security Agreement.
- (b) Affecting the security of less than Category II quantities of SNM and/or materials, facilities, or operations not covered by the classified threat guidance issued by DP-1. These exceptions are developed and approved by the Heads of Field Elements. Written records of such exceptions are included in the appropriate site-specific safeguards and security plan(s) and/or Master Safeguards and Security Agreement.

(5632.1A)

Exception request

A request to approve official foreign travel that has been submitted too late to allow compliance with the 30-day forms submission requirements detailed in paragraph 9, Procedures. (1500.3)

Excess baggage

Baggage in excess of the weight, number of pieces, or size, that is carried free by transportation companies—41 CFR 301-5.1. (1500.2A)

Excess nuclear material

Inactive nuclear material that is not needed for programmatic use. (5660.1)

Excess real property

Land, improvements to land, or both, including interest therein, which are not required for the Department's needs or the discharge of its responsibilities. (4300.1B)

Exchange visitor program

A program sponsored by the United States Information Agency (USIA). The program provides for joint projects, research assignments, or specialized training at DOE facilities by foreign nationals selected by officials of their country, or by DOE to promote the general interest of international exchange. See Attachment 2. (1240.2A)

Exclusion area

A security area for the protection of classified matter where mere access to the area would result in access to classified matter. (6430.1A) (5632.1A) (5631.2B) (5637.1)

Exclusive use of vehicle

A service whereby a vehicle is assigned for the sole use of a specific consignor, loaded only by that consignor, and unloaded only by the consignor or consignee. (1540.1)

Exemption

A release from the requirements of this Order for a facility listed in Attachment 1 or 2. (5480.18)

Exercise

1: An event that tests the integrate capability and a major portion of the basic elements of emergency preparedness as specified in site specific plans. (5500.3, Change 1); 2: A scheduled and planned event that tests the integrated capability and a major portion of the basic elements of emergency preparedness as specified in emergency plans and procedures. (5500.1A, Change 1); 3: Any scenario that simulates an actual incident to which a security force would respond. (5480.16, Change 2)

Exercise area**Exercise area**

An area geographically defined to contain the exercise. (5480.16, Change 2)

Exercise plan

A plan that is written and reviewed to outline a security exercise.
(5480.16, Change 2)

Exhibit

Any display, usually three-dimensional, which uses photographs, models, hardware, copy, and special effects, such as lighting, animation, microcomputers, analog simulators, or audiovisual productions, to communicate information to an audience. (1350.1)

Exit conference

A formal conference held at the conclusion of the audit for the purpose of discussing audit results. (2320.2A)

Expansion joints

A joint between parts of a structure to avoid distortion when subjected to temperature change. (6430.1A)

Expenditures

See Outlays. (2200.4)

Expert

A person whose knowledge and mastery of the principles, practices, techniques, problems, and methods of a professional, scientific, technical, or other field are clearly superior to those of most competent persons in that activity; and whose attainment is such that he or she is viewed as an authority by other persons in the profession or activity. An expert provides services which cannot be performed satisfactorily by someone not an expert in the field and when such knowledge and special abilities are not available within the Department of Energy. (3304.1)

Expired appropriation

An appropriation that is no longer available for new obligation but that is still available for payment of or adjustment to existing obligations. (2200.4)

Explosive

Any chemical compound or mechanical mixture that, when subjected to heat, impact, friction, shock, or other suitable initiation stimulus, undergoes a very rapid chemical change with evolution of large volumes of highly heated gases that exert pressures in the surrounding medium. The term applies to materials that either detonate or deflagrate. (6430.1A)

Explosives activity

Each function (storage, handling, and processing) involving explosives from the manufacture or receipt of the explosives through the final shipping configuration, including final storage but excluding the movement of explosives between explosives area. (6430.1A)

Explosives bay

A location (room, cubicle, cell, work area) containing a single type of explosives activity that affords the requirement protection for the appropriate hazard classification (Class I, II, or IV as defined below) of the explosives activity involved. Examples of such explosives activities are machining, pressing, meltcasting, nondestructive testing, and assembly operations. (6430.1A)

Explosives building

Any structure containing one or more explosives bays. (6430.1A)

Explosives hazards classes

The level of protection required for any specific explosives activity, based on the hazard class (accident potential) for the explosives activity involved. Four hazard classes are defined for explosives activities as follows in definitions for explosives hazard classes I-IV.

continued on next page

Explosive hazards classes

Explosive hazards classes (continued)

- (a) **Explosive hazard class I** Class I consists of those explosives activities involving a high potential for an accident that is unacceptable for the exposure of any personnel, thus requiring remote operations. In general, this would include activities where the energies that may interface with the explosives are approaching the upper limits of safety, and/or loss of control of the energy is likely to exceed the safety limits for the explosives involved. This category includes those research and development activities where the safety implications have not been fully characterized. Examples of class I activities are screening, blending, pressing, extrusion, drilling of holes, dry machining, some wet machining, machining explosives and metal in combination, development of some new explosives or explosives processing methods, and explosives disposal.

- (b) **Explosives hazard class II** Class II consists of those explosives activities that involve a moderate potential for an accident because of the type of explosives, the condition of the explosives and/or the nature of the operations involved. This category consists of activities where the accident potential is greater than Class III but the exposure of personnel performing contact operations is acceptable. Included are activities where the energies that do or may interface with the explosives are normally well within the safety boundaries for the explosives involved but where the loss of control of these energies might approach the safety limits of the explosives. Examples of Class II activities involving HE are weighing, some wet machining, assembly and disassembly, and environmental testing (exposure of explosives samples to variations in temperature, humidity, etc.). It should be noted that some environmental testing is a Class I (remote) activity (e.g., heating an explosives sample to within 10°C of its critical temperature).

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Explosives hazards classes (continued)

- (c) **Explosives hazard class III** Class III consists of those explosives activities that represent a low potential for an accident because of the type of explosives, the conditions of the explosives and/or the nature of the activity involved. Class III includes explosives activities where the accident potential of the operation being performed is not significantly different from explosives storage. Examples are normal handling, storage, packaging, unpackaging, and some inspection and nondestructive testing.
- (d) **Explosives hazard class IV** Class IV consists of those explosives activities with insensitive high explosives (IHE) or IHE subassemblies that, although mass detonating, are so insensitive that there is negligible probability for accidental initiation or transition from burning to detonation. Explosions will be limited to pressure ruptures of containers heated in a fire. Although the fire hazards of IHE or IHE subassemblies are not as great as those of other explosives, it is classified as a hazard class/division 1.3 (mass fire) to be consistent with DOD 6055.9. Most processing and storage activities with IHE and IHE subassemblies are Class IV. However, the following are examples of explosive activities with IHE or IHE subassemblies that remain class I: pressing, some machining (see DOE/EV 06194); dry blending, dry milling, and dry screening.

(6430.1A)

Export Controlled Information (ECI)

Certain unclassified Government information under DOE's cognizance which, if generated by the private sector, would require a specific license or authorization for export under United States laws or regulations. ECI includes nuclear, nuclear-related, and other types of information the release of which could reasonably be expected to adversely affect United States national security and nonproliferation objectives. (1240.2A)

External corrosion

Corrosion of that portion of a metal structure (i.e., pipe) that is exposed to external elements such as air, water, or soil. (6430.1A)

External impact

External impact

The burden (which includes all associated costs and personnel time) imposed on one or more Departmental Element(s) or contractors by the data reporting and/or processing requirements and/or products associated with a computer software application initiated by another Departmental Element or contractor(s). The burden imposed by an operations office on those contractors under its direct managerial cognizance would not be considered to be external burden. (1330.1C) (1330)

External transfers

Transfers of nuclear materials from one reporting identification symbol (RIS) to another. (5633.3, Change 1)

Extremity

Extremity includes hands and arms below the elbow or feet and legs below the knee. (5480.11, Change 1)

DOE ORDER DEFINITIONS

F

Facilities

Buildings and other structures, their functional systems and equipment, and other fixed systems and equipment installed therein; outside plant, including site development features such as landscaping, roads, walks, and parking areas; outside lighting and communication systems; central utility plants; utilities supply and distribution systems; and other physical plant features. As used in these criteria, the term "nuclear facilities" is synonymous with the definition of this same term as contained in DOE 5480.5. (4330.2C) (6430.1A)

Facility

1: An educational institution, manufacturing plant, laboratory, or office building utilized by the Department or its contractors or subcontractors for the performance of work under the jurisdiction of the Department. (5632.1A) (5635.1A); 2: All or any portion of buildings, structures, equipment, roads, walks, parking lots, or other real or personal property or interest in such property; and the provision of facilities which includes the construction, expansion, renovation, remodeling, alteration, or acquisitions of facilities. (1600.6); 3: Any educational institution, manufacturing plant, laboratory, office, or building utilized by DOE or its contractors, subcontractors, or consultants. (5631.4); 4: An institution, manufacturing/assembly/process plant, laboratory, office building, or other complex utilized by the Department, its contractors, or subcontractors, for their performance of work under the jurisdiction of the Department. (5630.13); 5: Any equipment, structure, system, process or activity that fulfills a specific purpose. Examples include accelerators, storage areas, fusion research devices, nuclear reactors, production or processing plants, coal conversion plants, magnetohydrodynamics experiments, windmills, radioactive waste disposal systems and burial grounds, testing laboratories, research laboratories, transportation activities and accommodations for analytical examinations of irradiated and unirradiated components. (5000.3A); 6: As defined under the agreement: (a) a reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant, or a separate storage installation; or (b) any location where nuclear material in amounts greater than 1 effective kilogram is customarily used. (1270.2A);

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Facility

Facility (continued)

7: Plant, laboratory, office, or building utilized by DOE, its contractors, or subcontractors for which an emergency plan is required. (5500.1A, Change 1); 8: As used by DOE, refers to a building, structure, or group of buildings and/or structures that releases radionuclides and is subject to the regulations/standards pertinent to this Order. When considering 40 CFR Part 61-related subjects for reporting to EPA, the term "facility" is to be considered the same as the DOE term "site," and the term "source" is to be considered the same as the DOE term "facility". (5400.XY); 9: For the purpose of this order, a generic term used to refer only to a contractor-operated integral nuclear material handling complex, usually operated by a single contractor. A site or an RIS may consist of one or more separate facilities. (5633.3); 10: Plant, laboratory, office, or building utilized by DOE, its contractors, or subcontractors for which an emergency plan is required. (5500.1A, Change 1); 11: A general term which can be used to describe any or all of the three types of fixed site improvements which are including buildings, structures, and utilities. (4330.1B) (4300.1B); 12: Includes DOE, or Contractor, buildings, plants, storage areas, laboratories, and test ranges within a fenced or access-controlled area within the boundaries of a site. A site may encompass several facilities. (5480.3A)

Facility approval

A determination that a facility is eligible to receive, produce, use, or store classified matter, SNM, or other DOE property. This approval determination is limited to a safeguards and security perspective only. (5634.1A)

Facility authority

The individual, designated by the DOE project manager, developing specific project criteria not contained in the DOE 6430.1A. (6430.1A)

Facility boundary

The fence or other barrier that surrounds and prevents uncontrolled access to the facility or facilities. (6430.1A)

Facility data and approval record

A standard DOE form which is used to register a security facility on the Master Facility Register and to record approvals, changes, and delegations of security facilities and interests, the dates of surveys, and Headquarters review and analysis of survey reports. (5634.1A)

Fair market value

Facility manager

That individual, or his or her designee usually but not always a contractor, who has direct line responsibility for operation of a facility or group of related facilities, including authority to direct physical changes to the facility. (5000.3A)

Facility register

An index of security facilities under the administrative or survey responsibility of a field organization. (5634.1A)

Facility representative (DOE)

For each major facility or group of lesser facilities, an individual or his or her designee assigned responsibility by the Head of the Field Organization for monitoring the performance of the facility and its operations. This individual shall be their primary point of contact with the contractor and will be responsible to the appropriate Program Senior Official and Head of Field Organization for implementing the requirements of this Order. (5000.3A)

Factfinding

(a) An inquiry suitable to ascertain the relevant circumstances surrounding a grievance and to provide the basis for a written report which contains appropriate recommendations on the matter being examined and reasons for the recommendations. (b) In the event of a merit pay grievance, the report shall contain information, facts and supporting documents for the original determination and the recommended decision shall be limited to include or exclude the employee's position under the merit pay system. (c) The inquiry shall include, but not necessarily be limited to, consideration of: (1) the point of view of the supervisor, the employee, and a representative from the servicing personnel office; (2) applicable laws, regulations, case decisions, and departmental policies. (3771.1, Change 1)

Fail-safe

A design characteristic by which a unit or system will become safe and remain safe is a system or component fails or loses its activation energy. (6430.1A)

Fair market value

The amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would be sold by a knowledgeable owner willing but not obligated to sell to a knowledgeable purchaser who desired but is not obligated to buy. In ascertaining that figure, consideration would be given to all matters that might be brought forward and reasonably be given substantial weight in bargaining by persons of ordinary prudence, but no consideration whatever should be given to matters not affecting market value. (4300.1B)

Fair rental value

Fair rental value

The rental value under the proposed terms and conditions which the use of the real property commands in a competitive market. (4300.1B)

Family member

An employee's spouse, and spouse's parents; children, including adopted children, and their spouses; parents; brothers and sisters and their spouses; and any person related by blood or affinity whose close association with the employee is equivalent to a family relationship. (3630.2)

Federal Coordinating Officer (FCO)

1: The individual designated by the President, his representative, or the Director of FEMA to coordinate overall Federal response activities. The Federal coordinating officer (FCO) will facilitate interfaces, as necessary, between the response activities of the onscene commander and other Federal Agencies in support of the state and local government. (5530.1); 2: The individual designated by the President or his or her representative to coordinate overall Federal response activities under the Disaster Relief Act, PL 93-288. (5500.1A, Change 1)

Federal debt

There are three basic concepts or tabulations of federal debt:

- (a) **Gross federal debt** The sum of all public and agency debt issues outstanding;
- (b) **Debt held by the public** That part of the gross Federal debt held by the public. Debt held by Government trust funds, revolving funds, and off-budget Federal entities is excluded from debt held by the public;
- (c) **Debt subject to statutory limit** At present virtually all public debt, but only a small portion of Agency debt, is included in debt subject to statutory limit as the Second Liberty Bond Act of 1917, as amended.

(2200.4)

Federal legislative jurisdiction

Federal Emergency Management Agency (FEMA)

The Federal Government agency which has been tasked to coordinated COG planning for the entire domestic Federal Government. In this sphere, FEMA provides the physical facilities for COG program and arranges for and conducts training and exercises. In addition, FEMA provides administrative and logistical support for COG activities. (5500.9)

Federal employee

Any person who is directly employed by the DOE or who is authorized to work for the Department by law, rule or regulation. The term does not include contractor employees. (3790.1A)

Federal employee occupational safety and health program

That program mandated by Executive Order 12196 and implemented by 29 CFR 1960, DOE 3790.1A and HQ 3790.2. (5480.1B) (5482.1B)

Federal information processing standards

Government wide ADP and data communications standards or guidelines issued by the National Institute of Standards and Technology. The objectives of the Federal Information Processing Standards Publications program are to: (a) facilitate the interchange and sharing of data, programs, and equipment, by Federal agencies and the public; (b) improve the performance and quality of ADP products developed or acquired by Federal agencies; and (c) enhance the effective utilization of ADP products and services by Federal agencies. (1360.3B)

Federalism assessment

An evaluation of the likely effects, possible options, and rationale to be prepared for and used by a decision maker prior to implementation. (2030.3)

Federalism implications

Any proposed Federal, National Government, or Departmental policy, regulation, or legislation which would have a substantial direct effect on States, on the relationship between the National Government and the States, and on the distribution of power and responsibilities among the various levels of government. (2030.3)

Federal legislative jurisdiction

The power and authority of Federal Government to legislate and exercise executive and judicial powers within defined areas. (4300.1B)

Federal Library and Information Center Committee (FLICC)

Federal Library and Information Center Committee (FLICC)

Committee comprised of representatives from Federal Libraries and Information Centers which coordinates a variety of services to them through FEDLINK. (1430.4)

Federal Radiological Emergency Response Plan (FRERP)

- 1: A comprehensive, coordinated operations plan describing the entire Federal Government response to radiological emergencies. (5530.1);
- 2: A comprehensive, coordinated plan broadly describing the entire Federal Government response to radiological emergencies in support of federal, state, and local government agencies. (5500.1A, Change 1)

Federal Radiological Monitoring and Assessment Center

A facility established by the DOE Offsite Technical Director, usually at an airport near the scene of a radiological emergency, from which the Offsite Technical Director conducts the Federal Radiological Monitoring and Assessment Plan response. The Federal Radiological Monitoring and Assessment Center need not be located near the onsite or Federal-State operations centers as long as coordination is possible. (5500.1A, Change 1)

Federal Radiological Monitoring and Assessment Plan (FRMAP)

- 1: A plan devised to provide radiological monitoring and assessment assistance to State and local governments in response to radiological incidents. This plan is required by 44 CFR 351. (5530.1);
- 2: A plan contained in the Federal Radiological Emergency Response Plan for coordinating Federal offsite radiological monitoring and assessment with that of the affected states. (5500.1A, Change 1)

Federal records

- 1: In accordance with 44 U.S.C. 3301, include "... all books, papers, maps, photographs, machine-readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal Law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and of processed documents are not included." (1324.11);

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Federal records (continued)

2: (a) Documentary materials are all media containing recorded information, regardless of the nature of the medium or circumstances of recording. This includes paper, film, disk, or other physical type or form, and the method of recording may be manual, mechanical, photographic, electronic, or any other combination of these or other technologies; (b) made refers to the act of recording information by personnel, regardless of the method and the medium involved. The act of recording is generally manifested by circulation to others or by filing where the information would be accessible to others; (c) received refers to the receipt of documentary materials by personnel regardless of origin (private citizens, public officials, other agencies, contractors, Government grantees, etc.) and regardless of how transmitted (in person or by messenger, mail, electronically, or any other method). In this context, the term does not refer to misdirected materials. It may or may not refer to loaned or seized materials depending on the conditions under which such materials came into DOE or DOE-contractor custody or were used by the Department or DOE-contractor. Advice of legal counsel should be sought regarding loaned or seized materials; (d) preserved is the filing, storage or other method of systematically maintaining documentary materials by DOE or DOE-contractors. The phrase covers materials temporarily removed from established filing systems as well as materials actually filed or otherwise systematically maintained; (e) appropriate for preservation refers to documentary materials that, because of the evidence or information they contain, should be filed, stored or otherwise systematically maintained by DOE or DOE-contractors even though the materials may not be covered by current filing or maintenance requirements.

(1324)

Federal Records Center (FRC)

A records storage facility operated by the National Archives and Records Administration for storage and servicing noncurrent records. See chapter IV. (1324.2A)

Federal register liaison

The process of communicating with the Office of the Federal Register to ensure full compliance with the "Federal Register" program and administrative requirements. (1900.1D)

Federal salary offset program

Federal salary offset program

A program designed to identify Federal employees who are delinquent on their debts to the Government; notify the Federal employing agency; and collect the debt in full or bring the debtor into repayment status. (2200.2A)

FEDLINK

Coordinating system to provide access to online database systems and other services available for access by Federal Libraries and Information Centers through the Federal Library and Information Center Committee (FLICC). (1430.4)

Fee title

Full and unconditional ownership of surface, subsurface, and air rights. The words "fee" and "fee title" are used interchangeably. (4300.1B)

Fiber optics

Glass fibers designed to permit the transmission of a light beam from one end of the fiber to the other with minimum loss of intensity. Modulation and demodulation of a light beam allows transmission of information through a fiber optic medium for several miles. This is similar to transmission of electrical signals through a metallic conductor. (5300.4B)

Field element

1: Any departmental organizational component located outside the Washington, D.C., metropolitan area. (6430.1A) (5632.1A) (5480.16, Change 2); 2: The components of the Department that have financial management responsibility for one or more allottees. This term is generally limited to power marketing administrations, the naval reactors offices in Schenectady and Pittsburgh, and the operations office. (2200.4); 3: A Departmental Element located outside the Washington, D.C. geographical area, such as the Operations Offices and the Energy Technology Centers. (5480.14); 4: Any officially established Departmental organization located outside the Washington, DC, metropolitan area. (4300.1B)

Field facility/building emergency plans

Plan prepared by Headquarters, field, elements, field contractors or offices under field element jurisdiction to guide response to specific buildings or facilities, e.g., office buildings, Forrestal and Germantown Buildings, process building, laboratories. (5500.1A, Change 1)

Field site emergency plans

Field level exemption

An interim release from a mandatory standard, granted by the field organization after a request for a temporary or permanent exemption. Such exemptions shall not exceed 180 days and are not renewable. (5480.3)

Field office

A DOE operations office, or equivalent. (QC-2)

Field of interest register

A method used by the Department of Defense to authorize automatic distribution of documents from the Defense Technical Information Center. Access is controlled by subject category and by classification level. (5610.2)

Field organization

1: A general term for any officially established Departmental component (excludes individual duty stations) located outside the Washington, D.C., metropolitan area. (1300.3); 2: A Departmental Element located outside the Washington, D.C. geographical area. (5480.3) (5480.10) (5634.1A) (5480.4, Change 1); 3: The first line DOE field element that carries the organizational responsibility for (a) managing and executing assigned programs, (b) directing contractors who conduct the programs, and (c) assuring that environment, safety, and health are integral parts of each program. (5400.1, Change 1); 4: A DOE field-based office which is responsible for the management, coordination, and administration of operations under its purview, and reports to the cognizant program Secretarial Officer(s) or equivalent, through the appropriate program office(s). (5483.1A); 5: Any officially established DOE office located outside the Washington, D.C., metropolitan area which exercises a degree of direction, control, or management of a site and includes such organizations as project offices and operations offices. (4330.4)

Field site emergency plans

Plans prepared by field element contractors or other entities under field element jurisdiction to guide their response for identified credible emergencies. (5500.1A, Change 1)

Field Work Proposal Format

Field Work Proposal Format

A standard format that may be used by a program office to secure information for program planning or budget formulation. It may be used as all or part of the documentation for work authorization. The format may also be used by an M&O contractor to describe work proposed by the contractor. For example, see Attachment 3. At the discretion of the Program Secretarial Officer, the Field Work Proposal Format may be used for non-M&O contractors for budget and financial planning purposes. (5700.7B, Change 2)

File cutoff

Termination of a file at periodic intervals to facilitate continuous disposal of the filing series in complete blocks, sometimes called "file break." (1324.2A)

File equipment

Items of equipment used to house records. (1324.3)

File item

A single document or case file of a filing series such as an item of correspondence, a report, a completed form, a map, a drawing, or a bound volume. It may also be a case file such as a voucher with attached supporting papers or a personal history folder relating to an employee. (1324.2A)

File station

Location where records are maintained for current use. (1324.3)

File supplies

Folders, guide cards, and related items used to maintain and service records. (1324.3)

Filing series

A series of identical or equivalent file items characterized by a consistent method of assembly and handling, a common arrangement of the component items, and uniform as to subject, type of information recorded, or kinds of transactions reflected. A filing series may also include related elements physically separated from it such as finding aids or bulky material. (1324.2A)

Final audit report

The report ultimately released by the IG after consideration of the program/operation comments received on the official draft audit report and raised during the exit conference. (2320.2A)

Final judgement

The final order issued by the court in a legal action after all litigation is complete. (4300.1B)

Finance director

The management official responsible for the financial operations at a field element. This term includes officials with all or part of the responsibility for fund control, accounting, and managing the financial assets of the field. (2200.4)

Financial accounting standards board

An independent body established to promulgate accounting rules. The board is composed of representatives of universities, certified public accounting firms, and industry. (2200.4)

Financial information system

The departmental information system that accumulates data from financial subsystems and consolidates that data for Departmental reports issued internally and to the Office of Management and Budget, the Department of the Treasury, and the Congress. (2200.4)

Financial Management Systems (FMS)

1: Systems—both manual and automated—that are used to collect, classify, analyze, and report data for financial decision making; process, control, and account for financial transactions and resources; formulate and execute the budget; and generate financial information in support of the agency's mission. (1000.3B); 2: Those Department-level systems that are the inventoried components of the Department of Energy's Single Integrated Financial Management System (SIFMS). For purposes of this Order, FMSs are individually categorized under the caption of Primary Accounting System, subsidiary financial systems, or program financial systems. (2200.12)

Finding

1: A statement of fact concerning a condition in the ES&H program that was investigated during an appraisal. It may be a simple statement of proficiency, or a description of a deficiency (i.e., a variance from procedures or criteria). Both severity and potential consequences should be addressed in describing a deficient condition. (5482.1B);

continued on next page

Finding

Finding (continued)

2: A separate and distinct situation in a surveyed organization that exists in violation of directives. "Finding" situations shall be either brought into compliance with DOE Orders, or granted an approval based on an exception, or accepted program departure. Each "finding" shall be referenced to a specific directive and assigned a unique identification number used in conjunction with a specific corrective action proposed and implemented by the field organization or contractor. (5634.1A); 3: A written observation describing a problem area disclosed by an audit. Findings serve as the basis for audit recommendations. (2300.1A)

Firearms

Include all weapons capable of propelling a missile by means of an explosive charge, as well as all explosive ordnance, ESS equipment, chemical weapons, and pyrotechnic devices. (5480.16, Change 2)

Firearms range

An area designated for firearms training; it does not include training areas where blank ammunition or ESS weapons are used exclusively. (5480.16, Change 2)

Fire protection

Protection from a broad range of fire risks normally included in the analysis conducted by fire protection engineers. These include some aspects of related perils such as explosion, windstorm, earthquake, lightning, and water damage. Fire prevention programs are a necessary part of fire protection programs. (5480.7)

Fire protection system

Any system designed to control or extinguish fires or to limit the extent of fire damage. These include:

- (a) automatic suppression systems such as sprinklers, Halon, or carbon dioxide systems;
- (b) watchmen or automatic detection systems, water supplies, plus a fire department;
- (c) walls and doors;
- (d) building separation with credit for water supplies, plus a fire department.

(5480.7)

Fiscal year

Any yearly accounting period, without regard to its relationship to a calendar year. The fiscal year for the Federal Government begins on 10-1 and ends on 9-30. The fiscal year is designated by the calendar year in which it ends; e.g., fiscal year 1987 is the fiscal year ending on 9-30-1987. (2200.4)

Fissile classification

Classification of a package or shipment of fissile materials according to the controls needed to provide nuclear criticality safety during transportation as follows:

- (a) **Fissile class I** Packages that may be transported in unlimited numbers and in any arrangement and that require no nuclear criticality safety controls during transportation. For purposes of nuclear criticality safety control, a transport index is not assigned to Fissile Class I packages. However, the external radiation levels may require a transport index number.
- (b) **Fissile class II** Packages that may be transported in any arrangement but in numbers that do not exceed a transport index of 50. For purposes of nuclear criticality safety control, individual packages may have a transport index of not less than 0.1 and not more than 10. However, the external radiation levels may require higher transport index number but not to exceed 10. Such shipments require no nuclear criticality safety control by the shipper during transportation.
- (c) **Fissile class III** Shipments of pairments of Fissile Class I and II and that are controlled in transportation by special arrangements between the shipper and the carrier to provide nuclear criticality safety.

(5480.3)

Fissile material

A nuclide capable of undergoing fission by interaction with slow neutrons provided the effective thermal neutron production cross section, $\nu\sigma_f$, exceeds the effective thermal neutron absorption cross section, σ_a . (6430.1A)

Fissile materials

Fissile materials

Uranium-233, uranium-235, plutonium-238, plutonium-239, plutonium-241, neptunium-237, and curium-244. (5480.3)

Fissionable materials

Nuclides capable of sustaining a neutron induced fission chain reaction—e.g., uranium-233, uranium-235, plutonium-239, plutonium-238, plutonium-241, neptunium-237, americium-241, and curium-244. (5480.5)

Fissionable materials handler

An individual officially designated by management to manipulate or handle significant quantities of fissionable materials, or manipulate the controls of equipment used to produce, process, transfer, store, or package significant quantities of such materials. (5480.5)

Five thousand dollars (\$5,000) exemption

An exemption from mandatory provisions of the Defense Priorities and Allocations System Regulation, concerning rated orders in an amount less than \$5,000, which may be applicable to delegate agencies and persons receiving rated orders. (5560.1A)

Flare

A mechanical device that uses pyrotechnic materials to produce light for signaling, illuminating, or attracting attention. (5480.16, Change 2)

Flash grenade

A device that produces a brilliant flash (of about 2 million candle power) and a loud report—200 decibels at a distance of about 5 feet (1 1/2 meters) without producing lethal fragmentation. (5480.16, Change 2)

Flexural strength

The strength of a material in bending, that is, resistance to fracture. (6430.1A)

Flight crewmember

A person assigned to perform flight duties or DOE mission duties in an aircraft during flight time. (5480.13)

FMS Corrective Actions

FMS Corrective Actions are all nonrecurring activities, which were identified during FMS reviews as necessary improvements to achieve compliance with OMB Circular A-127 requirements. (2200.12)

Foreign currency account

FMS Enhancements

FMS Enhancements are nonrecurring initiatives not related to FMS Corrective Actions. (2200.12)

FMS Operation and Maintenance

FMS Operation and Maintenance includes all recurring activities by the user organization, other impacted organizations, and the ADP support activities necessary to accomplish the functions supported by the FMS. (2200.12)

Followup review

Review made by the IG or another organization of the Department to validate the claim that corrective action required by a final audit report has been completed. (2320.2A)

Foot-candle (or candela)

A unit of illumination equal to the illumination on the inside spherical surface that is everywhere 1 foot from a uniform point-source of light of 1 candle intensity. See also Candle. (5632.1A)

Force main

The discharge line from a sewage or storm water lift station. (6430.1A)

Force-on-force exercise

Simulates the actual intrusion of an enemy force and the appropriate response to such an intrusion. This may include limited scope performance tests and similar exercises. (5480.16, Change 2)

Forecasts

Projections of future nuclear materials activities for a project, such as inventories, requirements, and removals. (5660.1)

Foreign contacts

Contacts with any person who is not a U.S. Citizen or a U.S. National. (5631.1A)

Foreign currency account

See Special foreign currency program appropriations. (2200.4)

Foreign government information

Foreign government information

(a) Information provided by a foreign government or governments, an international organization of governments, or any element thereof with the exceptions, expressed or implied, that the information, the source of the information, or both, are to be held in confidence; or (b) information produced by the United States pursuant to or as a result of a joint arrangement with a foreign government or governments or an international organization of governments, or any elements thereof, requiring that the information, the arrangement, or both, are to be held in confidence. (5635.1A)

Foreign intelligence information

For the purpose of this Order, Foreign Intelligence Information is National Security Information relating to the capabilities, intentions and activities of foreign powers, organizations or persons, which carry the following special caveats for control and access:

- (a) **WNINTEL** Warning notice—intelligence sources and methods involved;
- (b) **NOCONTRACT** Not releasable to Contractors/Consultants;
- (c) **ORCON** Dissemination and extractions of information controlled by originator.

(5670.2)

Foreign national

1: For the purpose of this Order, is any person who is not a U.S. citizen or a U.S. national. (5631.4); 2: Any person who is not a U.S. citizen or a U.S. national. (5631.1A); 3: For the purpose of this Order, includes any person not a U.S. citizen or U.S. national, and any U.S. citizen and U.S. national representing foreign governments, foreign private interests, or other foreign nationals. Note that this definition of foreign nationals includes immigrant aliens. (5630.8A); 4: For the purposes of this Order, a foreign national is any person who is not a U.S. national or is a stateless person. An immigrant alien is considered a foreign national for the purposes of this Order. Foreign nationals sponsored for visits or assignments may include, among others:

- (a) officials or other persons employed by foreign governments or other foreign institutions, who may or may not be involved in cooperation under international agreements;

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Foreign ownership, control or influence

Foreign national (continued)

- (b) foreign students at U.S. institutions;
- (c) employees of DOE or other U.S. government agencies or their contractors, of universities, of companies (professional or service staff), or of other institutions; and
- (d) prospective employees of DOE or DOE contractors.

(1240.2A)

Foreign ownership, control or influence

- (a) Foreign ownership, control or influence exists when a DOE contractor performing classified work has an institutional or personal relationship with any of the following foreign interests, which are defined as:
 - (1) foreign government or foreign government agency;
 - (2) any form of business enterprise organized under the laws of any country other than the United States or its possession; or
 - (3) any form of business enterprise organized or incorporated under the laws of the U.S., or a State or other jurisdiction of the U.S., which is owned, controlled, or influenced by a foreign government, agency, firm, corporation, or person who is not a citizen or U.S. national.
- (b) A contractor is considered to be under foreign ownership, control, or influence when the degree of interest as defined above is such that a reasonable basis exists for concluding that compromise of classified information or significant quantity of special nuclear material, as defined in 10 CFR 710, may result.

(5634.1A)

Foreign technical information products

Foreign technical information products

Scientific and technical information received from other countries by the Department and its contractors through Government-to-Government exchange agreements, institution-to-institution exchange programs, scientist/engineer-to-scientist/engineer exchanges, information acquired during foreign visits or foreign work assignments, and research and development information included in DOE foreign trip reports. (1430.1A)

Form

A fixed arrangement of captioned spaces designed for entering and extracting prescribed information. Many forms are designed for collecting information from persons or organizations either inside or outside the collecting agency. The term includes automatic data processing (ADP) system forms and forms developed for optical scanning devices. Examples of ADP system forms are:

- (a) **Paper forms** designed to collect data for computer input; and
- (b) **Forms** layouts that are:
 - (1) preprinted on continuous feed computer paper;
 - (2) contained on overlays used to generate formatted computed outputs; and
 - (3) programmed by a Federal agency and printed by a computer.
- (c) **Other** types of forms include:
 - (1) **Standard Form (SF)** Prescribed by a Federal agency pursuant to its authority and approved by the General Services Administration (GSA) and, if required, Office of Management and Budget (OMB) for mandatory Government-wide use.
 - (2) **Optional Form (OF)** Developed by a Federal agency for use in two or more agencies and approved by GSA and, if required, OMB for nonmandatory Government-wide use.

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Form (continued)

- (3) **Departmental Form (DF)** Developed by DOE and designed to obtain or provide information common to the needs of two or more Departmental Elements. Departmental forms require approval by the Director of Administration (MA-2) or his or her delegate. (All information collection and interagency forms shall be considered Departmental.)
- (4) **Headquarters Form** Developed and approved for use by two or more Headquarters elements only. Headquarters forms requires approval by MA-2 or his or her delegate.
- (5) **Local Form** Developed and approved for use within a specific field or Headquarters element only. (Local forms shall be approved by the appropriate program manager for reports and forms.)
- (6) **Report Form** Designed for collection of data from persons or organizations either inside or outside the collecting agency.
- (7) **Information Collection Form** A written report form, application, schedule, questionnaire, or other similar vehicle calling for the collection of information from the public. (For purposes of this Order Government-owned, Contractor-operated (GOCO) facility contractors, offsite contractors, and financial assistance recipients are considered to be the public.) Information Collections must be approved by OMB.
- (8) **Interagency Form** A written report form used to report information to an agency from one or more other agencies covered by the Federal Records Act. Interagency forms must be approved by GSA, except those interagency forms used for general statistical purposes, which are approved by OMB.

(1322.2B)

Formal grievance

A request made in writing by an employee, a former employee, or a group of employees acting as individuals, for personal relief in a matter of concern or dissatisfaction relating to the employment of the employee(s) which is subject to the control of DOE management. (3771.1, Change 1)

Formal Inspection

Formal Inspection

A comprehensive survey of all or part of a workplace in order to detect safety and health hazards. Formal inspections include routine day-to-day visits or routine workplace surveillance of occupational health conditions. (3790.1A)

Formerly restricted data

1: Classified information jointly determined by the DOE and DOP/Assistant Secretary for Defense Programs (DP-1) and the DOD to be related primarily to the military utilization of atomic weapons, and removed by (the Assistant Secretary for Defense Programs) DOE DP-1 from the Restricted Data (RD) category pursuant to section 142(d) of the Atomic Energy Act. (5670.2) (5610.2) (5632.1A) (1270.2A); 2: Classified information jointly determined by the DOE (or its predecessors, the Atomic Energy Commission and the Energy Research and Development Administration) and the Department of Defense (DOD) to be related primarily to the military utilization of atomic weapons, and removed by the DOE from the restricted data category pursuant to section 142(d) of the Atomic Information/Energy Act of 1954, as amended, and safeguarded as national security information, subject to the restrictions on transmission to other countries and regional defense organizations that apply to Restricted Data. (5631.4) (5631.2B); 3: A category of information classified under section 42d, of the Atomic Energy Act and is defined in DOE 5650.2A. (5650.3, Change 1)

Formula Kilogram

Kilograms of contained uranium-235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope) alone, or in combination with plutonium and/or uranium-233 by multiplying the kilograms of plutonium and uranium-233 by 2.5 and adding this product to the kilograms of contained uranium-235 as follows: Formula Kilograms = (kilograms of contained U-234) + 2.5 (kilograms of Pu + kilograms of U-233). (5633.3)

Forwarding fund (grants)

The obligation of funds in one fiscal year for the financing of ongoing grantee programs during the succeeding year. The funds so obligated are added to the budget authority for the current fiscal year and deducted from the budget authorities of succeeding fiscal years. Appropriation language usually states the date after which the funds of the succeeding fiscal years may be obligated. (2200.4)

Freeboard

The height between the normal water surface elevation and the top of a hydraulic structure. (6403.1A)

Freedom Of Information (FOI) officer

The person designated to administer the FOIA at the DOE locations shown in Attachment 1. (1700.1, Change 1)

Free liquids

Liquids which readily separate from the solid portion of a waste under ambient temperature and pressure. (5820.2A)

Free-use computer

ADPE supplied to the Department for use in either a research or production mode without financial obligation by the Government. A free-use computer may involve costs associated with hardware or software maintenance. (1360.1A)

Frequent traveler

Anyone who is expected to make at least two trips a year. (5000.4)

Fuel burning installation

A stationary unit such as a boiler, gas turbine unit, combined cycle unit, internal combustion engine, process heater, or other combustor. (4330.2C)

Fuels

The term "fuels" is intended to be all-inclusive and, therefore, includes fossil fuels, nuclear and fission fuels, as well as geothermal, solar, and other energy sources. (5900.1)

Full cost

1: Both fund and nonfund costs including all significant expenses incurred in the operation of a data processing facility. Cost elements include direct and indirect expenses such as personnel, equipment rental, or depreciation, software (rental, purchase, or depreciation) supplies, contracted services, space occupancy (including building rental or depreciation) and utilities, intra-agency services and overhead, and interagency service. (2100.8);

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Full cost

Full cost (continued)

2: All direct costs and all allocable costs of producing the material or providing the services consistent with generally accepted accounting principles. Direct costs and allocable costs may include, but are not limited to, the following cost elements.

- (a) Direct labor (including fringe benefits), direct materials, other direct costs, processing materials and chemicals, power and other utilities, and maintenance.
- (b) Indirect costs, i.e., common costs that cannot be directly assigned to specific cost objectives and are therefore allocated to cost objectives in a systematic cost allocation process.
- (c) Contractor profit/fees and management allowances paid by DOE.
- (d) Depreciation includes depreciation costs that are directly associated with facilities and equipment utilized, and allocated depreciation costs for support and general facilities and equipment.
- (e) Added factor includes general and administrative costs and other support costs that are incurred for the benefit of the Department, an organizational unit, or a material or service as a whole. The base to which the added factor percentage is to be applied includes direct costs, indirect costs, and depreciation assignable or allocable to the material or service being priced.

(2110.1A)

Full-time equivalent

Comparable to 2,080 straight time paid hours in a fiscal year.

(4510.1A, Change 1)

Functional appraisal

A documented review of an ES&H specialty discipline performed in accordance with written guidance and criteria to verify, by examination and evaluation of objective evidence at the facility and/or operation, that applicable elements of the program have been developed, documented, and effectively implemented in accordance with specific ES&H requirements and needs.

(5482.1B)

Fund cost

A cost financed from the operating or plant and equipment appropriations, revolving funds, or trust funds. (2100.8)

Funding ceiling

Designates an upper limit placed on the amount of obligations or expenditures that may be incurred for a specific program, function, activity, or element of expense. This type of restriction is subject to departmental, rather than statutory, rules and penalties. Funding ceilings can be imposed on DOE by Congress, OMB, or internal Departmental management (e.g., ceilings on travel). Funding ceilings specified in AFP's may not be exceeded. (5100.14)

Funds

Accounting units established for segregating revenues and assets in accordance with law and for assuring that revenues and other assets are applied only to financial transactions for which they were appropriated or otherwise authorized. Funds are of different types and designed for different purposes.

- (a) **Federal fund** The fund collected and used by the Federal Government for the general purposes of the Government. There are four types of Federal fund accounts.
 - (1) **General fund** The fund credited with all receipts that are not earmarked by law and that are charged with payments out of appropriations of "any money in the Treasury not otherwise appropriated" and out of general borrowings.
 - (2) **Special fund** A fund created with receipts of the Government that are earmarked for a specific purpose. Generally, if the purpose of the fund is to carry out a cycle of business-type operations, it will be classified instead as a public enterprise fund.
 - (3) **Public enterprise fund** A revolving fund credited with collections, primarily from outside the Government, that are earmarked to finance a continuing cycle of business-type operations.

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Funds

(a) Federal fund (continued)

- (4) **Intragovernmental fund** Federal funds that facilitate financing of transactions with and between Federal agencies. Intragovernmental funds are of two types:
 - (a) **Public enterprise revolving fund** A revolving fund credited with collections, primarily from other agencies and accounts, that are earmarked by law to carry out a continuing cycle of intragovernmental business-type operations.
 - (b) **Management fund** A fund in which moneys derived from two or more appropriations are merged to carry out a common purpose or project, but not a cycle of operations. Management funds include consolidated working funds, which are set up pursuant to law to receive advance payments from other agencies or bureaus for agreed-upon undertakings, primarily for the benefit of the paying account.
- (5) **Trust fund** A fund credited with collections that are used by the Federal Government to carry out specific purposes and programs according to the terms of a trust agreement or a statute. Within the category of trust funds, trust revolving funds are those-type operations.
- (6) **Deposit fund** A fund established to account for receipts that are either:
 - (a) held in suspense temporarily and later refunded or paid into some fund of the Government;
 - (b) held by the Government as banker or agency for others and paid out at the discretion of the owner.
- (7) **Foreign currency** See Special foreign currency appropriations.

(2200.4)

DOE ORDER DEFINITIONS

G

Garnishee

A person against whom process of garnishment is issued. (2200.11)

Garnishment

A statutory proceeding whereby an employee's property, money, or credits in the possession of, under the control of, or owing by DOE, are applied to payment of the employee's debt to a third person by proper statutory process against debtor and garnishee. (2200.11)

Garnishor

A person in whose behalf the process of garnishment is issued and proper service of legal process is performed. (2200.11)

GDC planning board

The DOE advisory group of major Headquarters and field organizations involved in the construction of facility acquisitions, which includes those organization having planning, design, construction, environmental, safety and health, research, operations and maintenance functions. (6430.1A)

General control environment

Includes various factors such as management attitude, organization structure, competence and integrity of personnel, delegation and communication of authority and responsibilities, policies and procedures, budgeting and reporting, organizational checks and balances, automated data processing (ADP) considerations, and other factors which influence the effectiveness of internal controls over programs and administrative functions. (1000.3B)

General Counsel

The General Counsel provided for in §202(b) of the DOE Organization Act, or any DOE attorney designated by the General Counsel as having responsibility for counseling the Department on FOIA matters. (1700.1, Change 1)

General guidelines

General guidelines

Guidelines: (a) developed, approved, and issued by the Office of Classification and Technology Policy (DP-32); (b) based on controlling officials determinations; and (c) which are the basis for topical and internal guidelines. (5650.3, Change 1)

General management computer

1: A digital computer which is used for any purpose other than as part of a: (a) process control system; (b) combat weapon; (c) space system; or (d) mobile system. (2100.8); 2: Any general purpose computer that is not a special management computer. General management computers include data base machines, front-end and back-end processors, and computers used for management information systems, scientific/engineering applications, network functions, office systems, and computer-aided design, computer-aided engineering, computer-integrated manufacturing. (1360.1A)

General plant project

Congress has recognized DOE's need to plan for miscellaneous construction items that are required during the fiscal year and that cannot be specifically identified beforehand, and Congress annually provides an amount for these purposes under the title "General Plant Projects."

- (a) **General-purpose facilities** Miscellaneous general facilities, such as roads, site utilities, and support building (e.g., multiprogram laboratory and office buildings and maintenance).
- (b) **General-purpose equipment** Items of general use needed to make a general-purpose facility.

(2200.4)

General plant projects

Miscellaneous minor new construction projects of a general nature, the total estimated costs of which may not exceed \$1,200,000 per project. General plant projects are necessary to maintain the facilities in a good state of repair, to adapt the facilities to new or improved production techniques, to effect economies of operations, and to reduce or eliminate health, fire, and security problems. The levels of general plant projects required are affected by the age and condition of the plant and a continuing concern for the protection of employees, the public, and the environment. This work is essential to protect and upgrade the Government's investment by preventing excessive deterioration and obsolescence.

- (a) By their nature, general plant projects are difficult to detail in advance. The estimated costs are preliminary in nature. Changing requirements, emergencies, and contingencies arising subsequent to the submission of the budget may force changes in scope, the deletion of projects, or the addition of new projects.
- (b) These projects provide for: design and/or construction; other capital alterations and additions; and improvements to land, buildings, and utility systems. These projects include: construction of small new buildings; replacement of or additions to roads; and general area improvements. The cost of installed equipment is included when it is an integral part of the project.
- (c) General plant projects funding is not intended to be used in incremental segments to construct larger facilities. Care should be exercised to ensure that each specific project is a discrete, stand-alone entity. Each project is to result in the delivery of a complete and usable facility.
- (d) In those occasional instances where design is funded in one fiscal year and the construction is funded in the next fiscal year, every effort should be made to complete the construction as early as possible. It is imperative that an audit trail be maintained at the executing office to verify compliance with the cost limitation and incremental funding prohibitions.

(5100.14)

General purpose ADPE

General purpose ADPE

All commercially available, mass-produced ADPE components and the hardware systems (digital and hybrid) created from them, regardless of use, size, capacity, or price, that are designed for a variety of applications and not for any specific application(s). General purpose ADPE includes both general management and special management computers to distinguish between different reporting requirements, especially in the computing resource portion of the information technology resources long-range plan. (1360.1A)

General purpose space

Space in buildings and associated land under the assignment authority of GSA which GSA has found to be suitable for the interchangeable use of Federal agencies. (4300.1B)

General Records Schedules (GRS)

1: Schedules issued by National Archives and Records Administration (NARA) that govern the mandatory disposition of specified recurring filing series common to several or all Federal agencies. (1324.2A); 2: Issued by the Archivist of the United States (i.e., NARA) to provide disposition authorization for records common to several or all agencies of the Federal Government. Use of the GRS is mandatory. The GRS does not cover all agency records. It must be supplemented by schedules for unique program records of an agency, such as found in DOE 1324.2A, chapter V. The GRS and the Department of Energy Records Schedules (DOERS) apply to records in the custody of management and operating (M&O) contractors and the Department. (1324)

Generic exemption

A temporary or permanent release from the requirements of this Order or other Orders in the DOE 5480 series, which extends beyond specific facilities and projects or applies to a category of facilities or activities. See also paragraph 8d(6). (5480.1B)

Generic threat guidance

The Departmental threat guidance issued by the Assistant Secretary for Defense Programs (DP-1). (5630.13)

Geometric mean

Mathematically expressed as the nth root of the product of all values in a set of n values:

$$(a) \quad \bar{X}_g = \left[\prod_{i=1}^n X_i \right]^{1/n}$$

or as the antilogarithm of the arithmetic mean of the logarithms of all the values of a set of n values:

$$(b) \quad \bar{X}_g = \text{antilog} \frac{\sum_{i=1}^n \log X_i}{n}$$

The geometric mean is generally used when the logarithms of a set of values are normally distributed, as is the case for much of the monitoring and surveillance data. (5400.XY)

Geometric standard deviation

Mathematically expressed as the antilog of the standard deviation of the logarithms of the measurements:

$$S_g = \text{antilog} \left[\sum_{i=1}^n \left[(\log X_i)^2 - \left(\frac{\sum_{i=1}^n \log X_i}{n} \right)^2 \right] / (n-1) \right]^{1/2}$$

(5400.XY)

Goods and services on order

Services or goods for which DOE has obligated funds, for which payment may or may not have been made, and for which cost has not been applied or accrued and amounts to assure that major contractors are provided funding authority beyond the end of the fiscal year for continuity of operations or to provide for the eventuality of contract termination. For accounting purposes, this is represented by the balance of uncostered obligations in unpaid obligations accounts. (2200.4)

Government

Government

The executive branch of the United States Government. (5650.3, Change 1)

Government agency

Any executive department, commission, independent establishment, or corporation, wholly or partly owned by the United States of American and which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government. (5635.1A)

Government aircraft

Any aircraft which is used exclusively by a Government Agency in carrying out noncommercial operations. Title 49 of The United States Code 1301(36) defines "government aircraft" as follows: "Government aircraft" means an aircraft used exclusively in the service of any government or of any political subdivision thereof, including the government of any State, Territory, or possession of the United States, or the District of Columbia, but not including any government-owned aircraft engaged in carrying persons or property for commercial purposes." Examples of "Government aircraft" are cited on page I-8, paragraph 12a(2). (1540.1)

Government cost estimate

An estimate of costs to be incurred in the conduct of proposed activity, prepared by DOE proponent (or advocate) by the measurable and definable elements of cost, consistent with the level that a responding contractor would be required to estimate, e.g., task, subtask, line item, and work breakdown structure. It should be sufficiently documented to show clearly the rationale used in developing the quantitative elements as well as the rates. The Government cost estimate usually is used as a tool in evaluating the reasonableness of the proposal(s) for the particular procurement action. This estimate is generally performed to support negotiations or competitive bid proposals at the individual contract level rather than at the total project level. (5700.2C)

Government function

A function which is so intimately related to the public interest as to mandate performance by Government employees. These functions include those activities which require either the exercise of discretion in applying Government authority or the use of value judgment in making decisions for the Government. (4510.1A, Change 1)

Government management functions

Government information

Any information that is (a) owned by, (b) produced by or for, or (c) otherwise controlled by the U.S. Government. (5650.3, Change 1)

Government management functions

Those functions so intimately connected with Government operations that they must be performed by Government employees in order to retain essential control and responsibility. These functions involve exercising discretionary authority and making final value judgments which affect the day-to-day or long-term development, execution, and evaluation of Government programs. Government management functions include but are not limited to:

- (a) assignment and evaluation of organizational responsibilities;
- (b) establishment of employment goals and priorities;
- (c) selections and direction of Federal employees;
- (d) evaluation of Federal employee performance;
- (e) development of budget policy, guidance, and strategy;
- (f) determination of acquisition strategy and acquisition plans;
- (g) selection of procurement sources;
- (h) action in a fiduciary capacity in the control and disbursement of Government funds;
- (i) determination of the success or failure of DOE internal management and program management activities;
- (j) determination of reporting requirements;
- (k) determination of requirements and design of management information systems;
- (l) determination of requirements for, and final design of, program or project management systems;
- (m) determination of economic barriers and tradeoffs for particular energy technologies;
- (n) establishment of technical performance criteria for energy technologies;
- (o) promulgation of any regulation;
- (p) determination of the legality of proposed policies;
- (q) final determinations regarding performance of DOE projects;
- (r) determination and advocacy of legislative initiatives on behalf of the Department;
- (s) representation of DOE in policy matters;
- (t) determination of energy production and consumption targets;
- (u) establishment of performance goals, priorities, and schedules;
- (v) establishment of assumptions for scientific and economic models.

(4200.3B)

Government-owned contractor-operated facility

Government-owned contractor-operated facility

For the purposes of this order, a facility owned or leased by DOE or contractor for the account of DOE in connection with which DOE prescribes and enforces through contractual provisions, occupational safety and health standards pursuant to the authority in the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, and the Department of Energy Organization Act of 1977, for contractor employees working therein.

A listing of these GOCO facilities is maintained by the Office of Operational Safety—EP-32. (5483.1A)

Government Travel System (GTS) account

An account established by the contractor at the request of the participating organization and used for common carrier charges only through a Scheduled Airlines Traffic Office, Travel Management Center, or compatible agency travel office. (1500.4)

Grab sample

A randomly taken, single sample acquired from an effluent stream over a short interval of time. (5400.XY)

Grace period

The number of days allowable after the due date for making payments before interest, penalties, or both, are applied. (2200.4)

Grade beam

A reinforced concrete beam placed indirectly on the ground to provide the foundation for the superstructure. (6430.1A)

Graded safeguards

1: A system designed to provide varying degrees of physical protection, accountability, and material control to different types, quantities, physical forms, and chemical or isotopic composition of nuclear materials consistent with the risks associated with threat scenarios. (5633.3); 2: A system designed to provide varying degrees of physical protection, accountability, and material control to different types, quantities, physical forms, and chemical and isotopic compositions of nuclear materials consistent with the risks associated with malevolent acts and varying levels of attractiveness and convenience to potential adversaries. (5634.1A)

Grantee

The person to whom an interest in the real property interest is conveyed. (4300.1B)

Grantor

The person conveying an interest in real property. (4300.1B)

Grants-in-aid

Federal programs to support services to the public authorized by law and administered by State or local governments. Grants do not include purchases from State or local governments. (2200.4)

Grenade launcher

A device that by means of gas pressure propels a grenade.
(5480.16, Change 2)

Ground crew

All personnel assigned to aviation operations other than flight crewmembers and administrative personnel. (5480.13)

Guaranteed loan

A loan for which the Federal Government guarantees, in whole or in part, the repayment of principal, interest, or both. (2200.4)

Guard

For the purpose of this Order, is an unarmed Departmental contractor individual who is employed for, and charged with, the protection of classified matter or Government property, excluding SNM. See Security inspector.
(5480.16, Change 2) (5632.1A).

Guidance

Information to assist in achieving the program policies and objectives.
(5480.8)

Guidelines

General, topical, or internal guidelines are: (a) criteria for determining which information is or is not UCNI; (b) approved by DP-32; (c) developed and issued by DP-32 or other organizations; and (d) the basis for determinations made by reviewing officials and denying officials. (5650.3, Change 1)

DOE ORDER DEFINITIONS

H

Halftime student

An individual enrolled in and carrying any combination of courses, research projects, or special studies which meet one-half or 50 percent of the academic workload standards and practices of the educational institution at which the student is enrolled. (3308.1)

Halogenated

Compounds that contain a halogen element—i.e., fluorine, chlorine, bromine or iodine. (6430.1A)

Handbooks

Used to publish information of value to the public, industry, and other non-DOE entities. They are not used for matters affecting the Department when applicable. See Directives. (1321.1B, Change 1)

Hand-carry authority

Written certification that the holder is authorized to hand-carry Secret and Confidential matter between DOE-approved security facilities. The hand-carry authority may be in the form of an official hand-carry card (DOE F 5635.13, "Authority to Hand-Carry Classified Matter"), or it may be a memorandum or letter certifying individual hand-carry authority for display to air terminal authorities. (5635.3)

Handguns

Hand-fired weapons normally carried as side arms. Handguns include all revolvers and pistols and may include submachine guns under some circumstances. (5480.16, Change 2)

Handicapped person

One who: (a) has a physical or mental impairment which substantially limits one or more of such person's major life activities; (b) has a record of such an impairment; or (c) is regarded as having such an impairment. (1600.5) (3300.2)

Hangfires

Missiles or rockets that have been fired but have not left the launching device. (5480.16, Change 2)

Hazardous materials

Hazardous materials

1: Any material that has been determined to be capable of posing an unreasonable risk to health, safety, or property. (6430.1A); 2: A substance or material, including a hazardous substance, which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated. These materials are listed in the Hazardous Materials Table, 49 CFR 172.101. (1540.2, Change 1); 3: Any material which has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. (1540.1); 4: Any solid, liquid, or gaseous material that is toxic, flammable, radioactive, corrosive, chemically reactive, or unstable upon prolonged storage in quantities that could pose a threat to life, property, or the environment. This definition is applicable to DOE Orders and is not to be confused with the term "hazardous material substance" defined in Section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and in 40 CFR 300.6. (5500.1A, Change 1); 5: All regulated hazardous materials, hazardous substances, and hazardous wastes, as defined in the DOT Hazardous Materials Regulations, 49 CFR; and the EPA regulations, 40 CFR 115, 116, and 262. (5480.3A)

Hazardous substance

1: For the purposes of transportation, means a material, including its mixtures and solutions, that:

- (a) is listed in the Appendix to 49 CFR 172.101;
- (b) is in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) listed in the Appendix to 49 CFR 172.101; and
- (c) when in a mixture or solution, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in Figure 1.

This definition does not apply to petroleum products that are lubricants or fuels. See 40 CFR 300.b.

continued on next page

Hazard ranking system

Hazardous substance (continued)

RQ Pounds	RQ	Concentration by weight	
	<u>Kilograms</u>	<u>Percent</u>	<u>PPM</u>
5000	2270.00	10.000	100,000
1000	454.00	2.000	20,000
100	45.40	0.200	2,000
10	4.54	0.020	200
1	0.45	0.002	20

(1540.2, Change 1); 2: (a) Any substance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act; (b) any element, compound, mixture, solution, or substance designated pursuant to Section 102 or CERCLA; (c) any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act; (d) any Toxic pollutant listed under Section 307 (a) of the Federal Water Pollution Control Act; (e) any hazardous air pollutant listed under Section 112 of the Clean Air Act; and (f) any imminently hazardous chemical substance or mixture with respect to which the Administrator of EPA has taken action pursuant to Section 7 of the Toxic Substances Control Act. (5480.14)

Hazardous waste

1: Any material that is subject to the hazardous waste manifest requirements of the Environmental Protection Agency (EPA) as specified in 40 CFR 262.

(1540.2, Change 1); 2: That waste defined as hazardous in 40 CFR Part 26. The radionuclides of source material, special nuclear material, and by-product material as defined by the AEA of 1954, as amended, are specifically excluded from the term hazardous waste. The hazardous components of waste mixed with the radionuclides of source, special nuclear, or by-product material are not exceeded from the term hazardous waste. (5400.3);

3: Wastes that are designated hazardous by EPA regulations—40 CFR 261. (5820.2A)

Hazard ranking system

The methodology used by EPA to evaluate the relative potential or inactive hazardous waste facilities to cause health or safety problems, or ecological or environmental damage. See Appendix 1, 40 CFR 300. (5480.14)

Head of Contracting Activity (HCA)

Head of Contracting Activity (HCA)

1: Official who has the overall responsibility for managing contracting activity. See Federal Acquisition Regulation 2.1, and Department of Energy Acquisition Regulation 902.1. (1331.1C); 2: A DOE official who has overall responsibility for managing a contracting activity, who has been delegated authority regarding acquisition functions, including appointment of contracting officers, and who has been designated as an HCA by the Procurement Executive. (4540.1B)

Head of DOE field organization

Within the context of this Order for the specific purpose of completing Part F (item 10) of DOE F 1512.1, "Request for Approval of Official Foreign Travel," includes designated Laboratory Directors who have been certified and delegated the authority to approve nonsensitive foreign travel for their employees. (1500.3)

Head of field element

The manager of a field element. (5632.1A)

Heads of field organizations

For the purposes of this Order, includes the administrators of the power administrations and the managers of DOE operations offices. (4220.4)

Headquarters Emergency Operations Center (EOC)

The Department of Energy center located in Germantown which acts as the point of contact in all emergencies, both receiving and transmitting information pertinent to the emergency. The center operates 24 hours a day and the telephone number is (301) 353-5555 or FTS 233-5555. (5500.4)

Headquarters or field element

The organization having contract authority or the field organization responsible for administering contracts or managing projects at Government-owned or -controlled, contractor operated facilities. (3220.6)

Headquarters or field organizations

The program office having contract authority, or the field organization responsible for the administration of contracts or management of projects at Government-owned or -controlled, contractor-operator facilities as defined in DOE Procurement Regulations 9-50-001. (3220.2, Change 2)

Headquarters staff

Heads of headquarters elements and employees under their respective jurisdictions. (5632.1A)

Headquarters teams

At the national level, DOE is required to maintain a crisis management team as well as provide representation to a National Emergency Management Team (NEMT). The DOE crisis management team would carry out the national-level essential functions of the Department, as prescribed in EO 12656, as long as Headquarters remains a viable operating site. The DOE representatives on the NEMT would relocate to at least two alternate emergency operating facilities, one of which would be shared by similar teams from the other Federal departments and agencies. (5500.9)

Heads of headquarters elements

1: For purposes of this Order, senior outlay program managers and include the Assistant Secretaries for Conservation and Renewable Energy, Defense Programs, Fossil Energy, and Nuclear Energy, the director of energy Research and the Director of Civilian Radioactive Waste Management. This definition also includes the Administrators of the Bonneville and Western Area Power Administrations. (5630.11); 2: This term refers to the Office of the Secretary, Secretarial Officers and DOE Staff Operations. (5634.1A)

Health examination

An examination performed by a licensed medical physician to determine the physical condition and general health for duty. (5480.6)

Health risk factors

Factors which adversely affect health and which may adversely affect reliability during the performance of assigned duties. (5480.YY)

Hearing Counsel

The DOE attorney assigned to prepare and conduct a personnel security hearing before the Hearing Officer. (5631.2B)

Hearing Officer

An individual appointed by the manager of an operations office who, upon considering the evidence at a hearing, makes specific findings as to the truth of the derogatory information, and determines whether to recommend the granting, continuation, revocation, or denial of an individual's access authorization. Hearing Officers shall be U. S. Citizens and have DOE Q access authorization. (5631.2B)

Helipad**Helipad**

A minimum facility heliport without auxiliary facilities such as waiting room, hangar, parking, fueling, and maintenance. (5480.13)

Heliport

An area, either at ground level or elevated on a structure, that is used for the landing and takeoff of helicopters. (5480.13)

High Efficiency Particulate Air (HEPA) filters

A high-efficiency particulate air filter having a fibrous medium that produces a particle removal efficiency of at least 99.97% for 0.3-micrometer particles of dioctylphthalate (DOP) when tested in accordance with MIL-STD-282. (6430.1A)

Higher standard of protection

A level of fire protection that exceeds the improved risk level of protection. This level of protection may sometimes be justified for the purpose of national security, program continuity, or protection of the public. (6430.1A)

High explosive deflagration

A rapid chemical reaction in which the output of heat is sufficient to enable the reaction to proceed and be accelerated without input of heat from another source. Deflagration is a surface phenomenon with the reaction products flowing away from the unreacted material along the surface at subsonic velocity. (5610.11)

High explosive detonation

1: The detonation or deflagration of the high explosive or propellant within the nuclear explosive. (5610.3); 2: A violent chemical reaction within a chemical compound or mechanical mixture evolving heat and pressure. A detonation is a reaction that proceeds through the reacted material toward the unreacted material at a supersonic velocity. (5610.11)

High Explosives (HE)

Explosive substances capable of mass detonation, and for which there is a significant probability of accidental initiation or transition from burning to detonation. (6430.1A)

High-level or protocol visit

This connotes the visit of a foreign national who is afforded special consideration for policy reasons. (1240.2A)

High-Level Waste (HLW)

The highly radioactive waste material that results from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid waste derived from the liquid, that contains a combination of TRU waste and fission products in concentrations as to require permanent isolation. (6430.1A) (5820.2A)

Historical documents

Those official non-current records of permanent value which have been determined by the Chief Historian to be essential to the DOE History Program in order to prepare the Department's official history and/or to maintain adequate institutional memory. The historical value of official non-current records is determined by the Chief Historian in accordance with DOE 1324.2A, Records Disposition. (1324.7)

History projects

Comprise all activities involving research, writing, editing, interviewing, transcribing, describing, cataloguing, preserving, collecting, or exhibiting matters of historical interest to the Department. These include, but are not limited to, books, monographs, pamphlets, articles, charts, posters, chapters, descriptions, introductions, interviews, and other writings which are primarily historical in nature, and activities involving historic preservation and cultural resource management. These do not include historical introductions to reports, testimony, legal briefings, program descriptions, or other documents where the historical component provides incidental background information and/or have no significant implication for policy direction. (1324.7)

Holdup (nuclear material)

1: Holdup is the nuclear material that is retained in process equipment at inventory time. (6430.1A); 2: The amount of nuclear material remaining in process equipment and facilities after the in-process material, stored materials, and product have been removed. Estimates or measured values of materials in holdup may be reflected in the facility's inventory records. (5633.3, Change 1)

Host

A DOE or DOE contractor employee who is sponsoring a visitor or assignee under this order. A visitor or assignee is not permitted to be a host. (1240.2A)

Hot lines

Hot lines

Phone numbers of local service companies factory-authorized to replace system components or appurtenances or valve repairs to same. Direct customer service phone numbers of manufacturers shall also be considered as "hot lines." (6430.1A)

Human factors

The biomedical, psychosocial, work place environment, and engineering considerations pertaining to people in a human-machine system. Some of these considerations are allocation of functions, task analysis, human reliability, training requirements, job performance aiding, personnel qualification and selection, staffing requirements, procedures, organizational effectiveness, and workplace environmental conditions. (6430.1A)

Human factors engineering

The application of knowledge about human performance capabilities and behavioral principles to the design, operation and maintenance of human-machine systems so that personnel can function at their optimum level of performance. (6430.1A)

Human reliability

The suitability and fitness of an individual to perform assigned duties consistently in a dependable, safe, and trustworthy manner. (5480.YY)

Human reliability program

A program to assure that DOE and DOE contractor employees involved in highly safety critical and/or highly security sensitive work assignments, will consistently perform their assigned duties in a dependable, safe, and trustworthy manner. (5480.YY)

Human subject

A living individual about whom an investigator (whether professional or student) conducting research obtains: (a) data through intervention or interaction with the individual, or (b) identifiable private information.

"Intervention" includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. "Interaction" includes communication or interpersonal contact between investigator and subject.

"Private information" includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

(1300.3)

Hydraulic structures

A structure for the conveyance and/or control of water under nonpressure open-channel flow. (6430.1A)

DOE ORDER DEFINITIONS

Identification badge

A distinctive badge which provides an individual's name, photograph, and clearance level that may include other information which identifies the bearer. Normally the badge is laminated or otherwise encased to provide a level of tamper resistance. (5632.1A)

Identification card

Optional Form 346, "The United States Government Motor Vehicle Operator's Identification Card," which specifies the types of Government-owned vehicles the holder is authorized to operate. (3791.2A)

Identification credential

An official identification that identifies the individual as a DOE employee. (3791.2A)

IHE subassemblies

IHE hemispheres or spheres with booster charges, with or without detonators, that pass the DOE qualification tests listed in Table IX-2 of DOE/EV 06194. (6430.1A)

IHE weapons

Weapons listed in DOE/DNA TP 20-7 as exempt from storage and transportation limits are classified as IHE weapons when stored or transported alone or in combination with each other. This classification is valid only by storage/shipping containers or, if out of containers, by the spacing specified in TP 20-7. (6430.1A)

Illegal drug

A controlled substance included in Schedule I or II, as defined in Title 21, U.S.C., Section 802(6), the possession of which is unlawful under Chapter 13 of that title. The term does not refer to the use of a controlled substance pursuant to a valid prescription or other uses authorized by law. (3792.3) (3220)

Immediate organization

Immediate organization

A person who is not supervisor or manager (e.g., analyst, bench scientist) is that organization (e.g., branch, team) subordinate to the person's direct supervisor or manager (e.g., branch chief, team leader). If a person is supervisor or manager (e.g., division director), the person's immediate organization (e.g., division) is that organization subordinate to the person. (5650.3, Change 1)

Immigrant alien

A foreign national authorized by the Immigration and Naturalization Service to reside and work in the U.S. for an indefinite period and who is eligible to become, in time, a U.S. Citizen. Most immigrant aliens may also be referred to as Permanent Resident Aliens (PRAs). (1240.2A)

Imminent danger

1: Any conditions or practices in any workplace, which are such that a danger exists, which could reasonably be expected to cause death or serious physical harm immediately or before the imminence of such danger, and can be eliminated through normal procedures. (3790.1A); 2: Any condition or practice which is such that a hazard exists that could reasonably be expected to cause death or serious physical harm to employees (permanent or prolonged impairment of the body or temporary disablement requiring hospitalization), unless immediate actions are taken to mitigate the effects of the hazard and/or remove employees from the hazard. (5483.1A)

Impaction

A process by which a particle or droplet is removed from an airstream by striking a surface in contact with the airstream. When a particle grazes a surface and is thus retained, the term interception applies. (5400.XY)

Impairment

A decrease in functional capacity caused by a physical, mental, emotional, or substance abuse disorder. (5480.YY)

Impervious

That property of surface that does not allow water or other fluids to pass through. (6430.1A)

Implementation

The installation and demonstration of complete operability of a computer program on a given hardware/software configuration. (1330.1C)

Implementation plan

1: A concise description of the approach, resources, and time period planned for implementing Orders that require such plans on a site-wide basis. The plan includes a description of the execution of environmental protection, safety, and health responsibilities and authorities by the field organization, and any proposed generic exemptions to parts of such DOE Orders. (5840.1B);

2: A concise description of the approach, resources, and time period planned for implementing this Order on a site wide basis, including a description of the execution of quality assurance responsibilities and authorities by the field organization and any proposed generic exemptions to the Order. (5700.6B, Change 1);

3: Documentation supporting the acquisition of a major item of ADPE which must be approved prior to release of a solicitation document for an acquisition. (1360.1A);

4: A plan, prepared as an Action Memorandum by a DOE Secretarial Officer, showing how an assignment of responsibility required by new legislation, executive order or reorganization plan will be carried out by his/her organization. The plan will include: (a) what actions are required to complete the assignment; (b) dates by which actions will be completed; (c) the organization(s) responsible for the actions;

(d) difficulties anticipated and proposed solutions; (e) impact on other DOE officers and requirements for assistance from other DOE organizations;

(f) identification of need for delegations of authority, organizational structure/mission and functions, manpower, facilities and other changes that will be required by the proposed implementation actions; (g) funding constraints and/or additional funds that will be required to carry out the IP, including a time schedule showing when funds will be needed (by fiscal year); and

(h) proposed language for DOE authorization and appropriations bills to permit execution of the new legislation, executive order or reorganization plan, where applicable. (2020.1)

Impoundment

Any action or inaction by an officer or employee of the United States that precludes the obligation or expenditure of budget authority provided by the Congress. (2200.4)

Impoundment resolution

A resolution of the House of Representatives or the Senate disapproving a deferral of budget authority set forth in a special message ordinarily transmitted by the President under section 1013 of the Impoundment Control Act of 1974. Passage of an impoundment resolution by either House of Congress has the effect of overturning the deferral and requires that such budget authority be made available for obligation. (2200.4)

Imprest fund

Imprest fund

A fixed cash or petty cash fund in the form of currency, coin, or a negotiable instrument charged against a Government appropriation account and advanced to a duly authorized cashier. The designation should state the general purpose of the advance. This fund may be of a revolving type, replenished to the level of a fixed amount as spent or used, or of a stationary nature, such as a change-making fund. (2200.4)

Improved risk

1: Generally, an improved risk level of property protection is one that would qualify for complete insurance coverage by the Factory Mutual system, the industrial risk insurers or other industrial insurance companies that limit their insurance underwriting to the best protected class of industrial risk. (6430.1A);

2: The term involves the use and application of judgment and thus does not lend itself to a precise, fixed definition applicable in all locations and situations. It has the same meaning and intent as is commonly understood when this or the term, "Highly Protected Risk," is used in the insurance industry. Generally, an improved risk property is one that would qualify for complete insurance coverage by the Factory Mutual system, the Industrial Risk Insurers, and other industrial insurance companies that limit their insurance underwriting to the best protected class of industrial risk. Essential elements of a program complying with the improved risk concept are included in this directive. Improved risk protection requires compliance with the fire protection and loss prevention standards detailed in DOE 5480.4, Environmental Protection, Safety, and Health Protection Standards of 5-15-84. This term also implies that qualified fire protection engineering judgment has been used to obtain the highest economically justifiable level of industrial loss prevention. The most evident characteristic of an improved risk property is the existence of reliable, automatic fire extinguishing systems throughout all buildings of combustible construction or content where the building is vital to operational continuity or may experience a large property loss from fire in the absence of an automatic extinguishing system. (5480.7)

Improvements

Buildings, structures, utility systems, transportation systems, and fixed equipment so attached to the building or structure as to become a part thereof and which cannot be removed without damaging either the improvement or the property to which it is affixed. (4300.1B)

Inactive hazardous waste disposal site

(Site) is an area where a hazardous substance has been deposited, stored, disposed of, or placed or otherwise come to be located. It can be any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft. Excluded are areas that have a permit issued, or have been accorded interim status under subtitle C of the Solid Waste Disposal Act or the Memorandum of Understanding between the DOE and the EPA for hazardous waste and radioactive mixed waste management, or operated under the provisions of DOE 5480.2 and DOE 5820.2. (5480.14)

Inch-pound system of units

The system of measurement units (inch, pound, second, degree Fahrenheit, and units derived from these) most commonly used now in the United States. Synonyms: "English System," "U.S. System," "Customary System." The inch-pound system is not to be confused with "Imperial System," which describes a related but not completely identical system currently in use in Great Britain and some other English-speaking countries. (5900.2)

Incident

An unplanned occurrence that could lead to disruption or operations or to personal injury or property damage. (5500.1A, Change 1)

Incidental operator

DOE employee, other than an operator, who occasionally operates a motor vehicle to properly carry out assigned duties. (3791.2A)

Incident report

A report of any theft or attempted theft of Government-owned property, or threatened, actual, or attempted arson, civil disorders, riots, sabotage, terrorism, or vandalism affecting facilities or property owned by, or contracted to, the Department. (5632.1A)

Inconsistency

Between RCRA and the AEA occurs if the requirements of both laws are incompatible. RCRA applies to hazardous or radioactive mixed waste to the extent it is not inconsistent with the requirements of the AEA. (5400.3)

Incremental costs

The change in total costs resulting from a change in an approved or current plan of operation. (5660.1)

Incurred claims

Incurred claims

Covered losses suffered or covered expenses incurred by insured persons during an accounting period. Claimants may or may not have been paid during the accounting period. (3890.1)

Independent cost analysis

A documented analysis developed by the Independent Cost Estimating Staff (or its contractors) for the purpose of assessing the reasonableness of proponent cost estimates and for identifying sensitive areas of cost risk. Generally, an independent cost estimate is accomplished and is used as a tool to perform an independent cost analysis; however, an independent cost analysis may be performed without first performing an independent cost estimate. (5700.2C)

Independent cost estimate

Estimate developed by the Independent Cost Estimating Staff, MA-221 (or its contractors) that has the express purpose of serving as an analytical tool to validate, cross-check, or analyze estimates developed in proponent channels. An independent cost estimate also serves as a basis for verifying risk assessments. The term "independent cost estimate" in this Order means independent of the project office or advocate. This Order does not usurp manager's prerogatives and responsibilities to direct check estimates (see Check estimate) to validate, improve, or review current project estimates. (5700.2C)

Indices check

A procedure whereby a request is made to appropriate U.S. Government agencies to determine if information exists on a particular foreign national. (1240.2A)

Individual

Any United States citizen or an alien lawfully admitted for permanent residence in the United States. It does not include corporations, associations, partnerships, trustees, receivers, and public or private organizations. (1800.1A)

Industrial hygiene

The science and art devoted to the recognition, evaluation, and control of environmental factors or stresses arising in or from the workplace that may cause sickness, impaired health and well-being, or significant discomfort and inefficiency among workers or those with whom they come into contact. (5480.10)

Information technology resources initiative

Information

1: A term restricted to facts, data, or knowledge itself, rather than the medium of conveyance. Documents and materials are deemed to convey or contain information and are not considered to be information per se. (5631.4); 2: Any fact or concept regardless of the physical form or characteristics of the medium on or in which it is recorded, contained, or revealed. (5650.3, Change 1); 3: The terms data, information, material, documents, and matter are considered synonymous and used interchangeably in this Order. They refer to all regardless of its physical form—e.g., data on paper printouts, tapes, disks or disk packs, in memory chips, in Random Access Memory (RAM), in Read Only Memory (ROM), on microfilm or microfiche, on communication lines, and on display terminals. (5637.1); 4: Any data, document, or material, regardless of its physical form or characteristics, that is owned by, produced by or for, or under the control of the United States Government. (5635.1A)

Information resources management

The planning, budgeting, organizing, directing, training, and control associated with Government information. The term encompasses both information itself and related resources, such as personnel, equipment, funds, and technology. (1324.5)

Information security oversight office

An organization of the General Services Administration, authorized by Executive Order 12356, to oversee Government implementation of that Executive order. (5635.1A)

Information system

A set of management procedures, operations, computer software and hardware, and functions devoted to the generation, assembly, utilization, storage, retrieval, and dissemination of data and information in order to facilitate the flow of information from its source to its user(s) and to provide information for management decision making. (1360.8)

Information technology resources initiative

Either an information technology resources acquisition (i.e., a computing resource or telecommunications item) or the acquisition, development, or modification of an automated IS. An information technology resources initiative may also be any combination of the above. (1360.8)

Information Technology Resource (ITR) long-range site plan call

Information Technology Resource (ITR) long-range site plan call

The ITR long-range site plan call is used to gather information on each organization's information systems requirements and plans. The data are also used to respond to directives from OMB, General Services Administration, and other Government agencies responsible for ADP acquisition oversight. (2200.12)

Informed consent

The legally effective consent by the human research subject, or the subject's legally authorized representative, to participate in research covered under this policy. It is obtained after providing to the subject the basic elements of informed consent as set forth in 10 CFR Part 745. Informed consent documents shall include disclosure of all potential risks and related consequences or adverse effects, as well as any benefits that may occur as a result of such participation. (1300.3)

Infraction

An act or omission involving failure to comply with DOE safeguards and security directives. (5635.1A)

Ingestion exposure pathway

1: The principal exposure from this pathway would be from ingestion of contaminated water or foods such as milk, fresh vegetables or aquatic foodstuffs. For the ingestion exposure pathway, the planning effort involves the identification of major exposure pathways from contaminated food and water and the associated control and interdiction points and methods. The ingestion pathway exposures in general would represent a longer term problem, although some early protective actions to minimize subsequent contamination of milk or other supplies should be initiated. (5500.3, Change 1);

2: The pathway by which contaminated water or foods such as milk, fresh vegetables, or aquatic foodstuffs would be assimilated from the digestive track. (5500.1A, Change 1)

Ingress

The act of entering a structure or area through a point of access. (6430.1A)

Inhabited building distance

1: The minimum distance permitted between locations containing munitions and inhabited buildings, administrative areas, site boundaries, main power stations, and other facilities of vital or strategic nature. (5480.16, Change 2);

continued on next page

Inhabited building distance (continued)

2: The minimum separation distance allowed between any explosives building and an installation boundary, between adjacent explosives buildings and/or other concentrations of personnel in non-explosives facilities such as administrative offices, shops, warehouses, inspection and test facilities, explosives laboratories, and so forth. This distance shall be determined based on maximum explosives weight, using the table in DOD 6055.9. (6430.1A)

In-house energy management program

A coordinated program concerning all aspects of the management, conservation, and use of all forms of energy in the design, construction, leasing, operation, and maintenance of DOE facilities, vehicles, and equipment. (4330.2C)

Initial startup

Includes those activities subsequent to preoperational testing, starting with the initial loading of fuel and involving all actions taken, including tests to assure a safe, orderly, incremental approach to predefined conditions of reactor operation. (5480.6)

Initiating office

Organization which authorizes the acquisition of goods or services using the DOE F 4200.33, Procurement Request-Authorization. (1331.1C)

Initiation stimulus

Energy input to an explosive in a form potentially capable in initiating a rapid decomposition reaction. Typical initiation stimuli are heat, friction, impact, electrical discharge, and shock. An initiator is a device that provides initiation stimuli (e.g., detonators, squibs, etc.). (6430.1A)

In-line

Refers to a system in which a detector or other measuring device is placed in the effluent stream for purposes of performing measurements on the effluent stream. (5400.XY)

In-process inventory

The quantity of material in a physical or chemical process area at any specified time. (5633.3, Change 1)

In-process or in-use material

In-process or in-use material

Material that is integral to the manufacturing or production processes and is needed to maintain continuity of operations. Other material that requires temporary location near the pertinent process areas in readiness for near-term use or for movement to other process areas may also be considered "in-process." For material involved in laboratory operations, analogous definitions shall be applied to determine eligibility for in the "in-process" or "in-use" category and consequent exclusion from storage requirements of these criteria. (6430.1A)

Insensitive High Explosives (IHE)

Explosive substances that, although mass detonating, are so insensitive that there is negligible probability of accidental initiation or transition from burning to detonation. The materials passing the DOE qualification tests in Table IX-1 of DOE/EV 06194 are classified as IHE, and are listed in Table IX-2 of the same document. (6430.1A)

Insider

An adversary with knowledge of operations and/or safeguards system characteristics, and/or access to SNM locations or transportation systems. (5633.3, Change 1)

In-situ

In the existing or original location. (6430.1A)

Inspection

1: Used in this Order to describe the type of inspections conducted by IG staff to promote economy and efficiency in the administration of the programs and operations of the Department. For purposes of this order, "inspections" is synonymous with "audit." (2320.2A); 2: A deliberate and systematic examination at the reactor including, but not limited to, physical inspection of reactor systems, operating and maintenance procedures, logs, records, and reactor operations. (5480.6); 3: Physical examination, inspection, measurement or tests used to determine the conformance of material to drawings and specifications. Verification inspection refers specifically to DOE inspection. (QC-1, Rev. 5)

Inspection report

For purposes of this Order, inspection reports and memorandum reports of inspections issued by the DOE Inspector General are considered to be the same as audit reports. (2300.1A)

Inspections

1: Reviews of the effectiveness of the implementation of DOE protection programs in selected topical areas at a specific operations office. Because multiple topics are reviewed at a single operations office, inspections may be referred to as "vertical" assessments of protection program effectiveness. Inspections include the conduct of activities at the management level and incorporate the results of performance testing. The inspection and performance testing results are analyzed and documented and form the basis for ratings. (5630.12); 2: Examinations of the effectiveness of the implementation of DOE protection programs in selected topical areas at a specific field facility. (5630.13)

Installation

A DOE production plant or national laboratory, such as the Y-12 Plant or the Los Alamos National Laboratory. (5480.14)

Installed equipment

Includes systems installed as a part of basic building construction and are essential to normal functioning of a building space. Plumbing, electrical, and mechanical systems are examples. (4330.4)

Institution

Any public or private entity or agency (including Federal, State, and other agencies). (1300.3)

Institutional control

A period of time, assumed to be about 100 years, during which human institutions continue to control wasted management facilities. (5820.2A)

Institutional memory

The recollection of past policies, programs, organizations, personnel, and related information concerning the Department or its predecessor agencies and laboratories, their program offices, and activities. (1324.7)

Institutional plan

A document prepared annually by each multiprogram laboratory which describes the results of the laboratory's annual institutional planning and the general agreement reached on the types and levels of activities to be conducted. (5700.7B, Change 2)

Institutional Review Board (IRB)

Institutional Review Board (IRB)

A board or committee charged with the responsibility for review of research activities involving human subjects conducted at, or sponsored by, the institution and approved by the Department of Health and Human Services (HHS) or the DOE. The composition of the IRB and details of its procedures and responsibilities are specified in 10 CFR part 745 and included in the multiple, single, or other project assurance. (1300.3)

Instructor

Any person assigned the task of instructing in a formal training program, regardless of whether that person is a member of the training department staff. (5632.1A)

Insurance

Describes coverage by agreement, whereby one party undertakes to indemnify or guarantee another against loss due to a specified contingency or peril. (3890.1)

Insurance collateral funds

Funds deposited with insurance companies, not a part of the premium, but held for the specific purpose of providing the insurance company with immediate cash in the event of catastrophe or some other event causing a large number of claims. (2200.4)

Integrated contractor

A DOE contractor, usually a management and operating contractor, that is required by contract provisions to maintain a separate set of accounts and records for recording and reporting all business transactions under the contract in accordance with DOE accounting practices and procedures and whose books of account are integrated with those of DOE through the use of reciprocal accounts. An integrated contractor may be a private enterprise, a nonprofit institution, a corporation, or any other form of organization legally capable of entering into a contract with DOE. (2200.4)

Intelligence community

Those United States Government organizations and activities identified in Executive Order 12333 or successor orders as comprising the Intelligence Community. (5670.2)

Interagency Group on Energy Vulnerability

Intelligence Information

Classified information defined as intelligence information by Director of Central Intelligence Directive 1/16. (5637.1)

Intelligence Information and related materials

1: Foreign Intelligence—Information relating to the capabilities, intentions and activities of foreign powers, organizations or persons. (5635.1A); 2: Related Materials—information describing U.S. foreign intelligence and counter-intelligence activities, sources, methods, equipment, and methodology used for the acquisition, processing, or exploitation of such intelligence; photography or recordings resulting from U.S. collection efforts. (5635.1A)

Interagency agreement

1: The contractual document between Federal agencies for consolidated purchase, joint use, or cross-service of utility services or facilities. (4540.1B); 2: A binding agreement with a Federal Government agency to provide funds, property, or services to DOE in exchange for funds, property, or services. (1332.1A)

Interagency Committee on Metric Policy

An interagency committee at assistant secretary level established under the auspices of the U.S. Metric Board to coordinate and provide policy guidance to the heads of Federal agencies on metrication. The Committee is comprised of representatives from the major Federal departments and agencies and is chaired by the Chairman of the U.S. Metric Board. (5900.2)

Interagency Group on Energy Vulnerability

The Interagency Group on Energy Vulnerability (IG-EV) is a forum chartered under the Senior Interagency Group for National Security Emergency Preparedness pursuant to National Security Decision Directive (NSDD) 188, Government Coordination for National Security Emergency Preparedness. It consists of senior representatives with national security emergency preparedness responsibilities from departments and agencies. The IG-EV facilitates Government-wide coordination of national policy issues relating to the vulnerability of U.S. energy systems in advance of crises, and coordinate crisis assessments and response recommendations in an emergency. (5500.8)

Interagency Steering Group for International Safeguards

Interagency Steering Group for International Safeguards

An interagency group that coordinates U.S. policy for all of its safeguards relationships with the IAEA. It coordinates U.S. assistance to help improve IAEA safeguards effectiveness and resolves interdepartmental issues relating to the agreement or the protocol. The Interagency Steering Group is composed of representatives from the Departments of State and Energy, the Nuclear Regulatory Commission, the Arms Control and Disarmament Agency, and the staff of the National Security Council. The Interagency Steering Group is chaired by the Deputy Assistant Secretary of State for Nuclear Energy and Energy Technology, or such other official as may be designated by the Secretary of State. (1270.2A)

Interest rate

The percentage rate based on the current value of funds to the Department of the Treasury to be used in assessing interest charges for outstanding debts owed the Government under the Debt Collection of 1982 (Public Law 97-365 and 31 U.S.C. 3717) as prescribed in the Treasury Financial Manual bulletins. An agency may assess a higher rate of interest if it reasonably determines that a higher rate is necessary to protect the interest of the United States. The rate of interest in effect at the date that interest begins accruing shall be the rate charged and it remains fixed for the duration of the indebtedness unless a different rate is prescribed in a repayment schedule. (2200.2A)

Interfaces

The relationships between two or more system components, or between the work environment and one or more system components. Human performance is a function of: the physical interfaces between people and equipment; the environments within which people or equipment work; the type and amount of training people receive; the accuracy and ease of use of the procedures people are given for guidance; and the effectiveness of the organizations in which people work. (6430.1A)

Interim access authorization

A determination by the Secretary, for access to National Security Information or Formerly Restricted Data, or by the Assistant Secretary for Defense Programs (DP-1), for access to Restricted Data or Special Nuclear Material, that it is clearly consistent with the national interest for the Department to permit an individual interim access authorization prior to receipt of full field reports of investigation. Interim access authorizations are not processed for access permittees or for individuals whose accesses will require an L or Secret clearance. (5631.2B)

Internal control (management control)

Intermittent employment

Work on programs, projects, problems, or phases thereof, which is accomplished on an occasional or irregular basis. When an expert or consultant works more than one-half of a service year, that is if he or she is paid for all or any part of a day for more than 130 days in a service year, such employment automatically ceases to be intermittent and becomes temporary. (3304.1)

Internal appraisal

An examination and evaluation by the operating level (either Federal or contractor) of those portions of its internal ES&H program, program plan implementation, and operations retained under its direct control. (5482.1B)

Internal Control Action Officer

Designated by the Head of a Departmental Element to serve as the principal point of contact for a Departmental Element in coordinating all planning, evaluating, reporting, and related internal control matters—often referred to as the “Internal Control Contact.” (1000.3B)

Internal Control Evaluation (ICE)

A review or audit performed to provide reasonable assurance that controls are in place and working effectively. Internal control evaluations may take the form of internal control reviews (ICRs), AICRs, GAO audits, IG audits, or management reviews and must include testing of internal controls. (1000.3B)

Internal control (management control)

Comprises the plan of organization, methods, and procedures adopted by management to provide reasonable assurance that: program objectives are achieved effectively and efficiently; obligations and costs are in compliance with applicable law; funds, property, and other assets are safeguarded against waste, loss, mismanagement, unauthorized use, or misappropriation; and revenues and expenditures applicable to the Department's operations are properly recorded and accounted for to permit the preparation of reliable accounts and financial and statistical reports that maintain accountability over assets. Internal control is applicable to programs as well as administrative functions. (1000.3B) (2200.4)

Internal Control Review (ICR)

Internal Control Review (ICR)

A detailed examination performed on an entire assessable unit or major activity(ies) of concern within that assessable unit. It is performed to determine if adequate control measures exist and are operating as intended to prevent or detect potential waste, loss, mismanagement, unauthorized use or misappropriation of resources. It must include testing of internal controls which are significant to the activity(ies) being reviewed. It is more structured and comprehensive than an abbreviated internal control review. (1000.3B) (2200.4)

Internal control system

1: The sum of an organization's methods and measures used to achieve the objectives of internal control for all or part of an agency as described by this Order. (1000.3B); 2: A set of administrative and accounting policies and procedures implemented by a facility to account for and maintain control of nuclear material. It includes checks and balances in the division of duties so designed that the work of one will serve to verify the work of another. (5633.3); 3: The totality of the methods and measures of internal control for all or part of an agency. (2200.4)

Internal directives

Issued by Headquarters organizations on matters applying only to the office of origin and may not be circulated outside the originating organization. (1321.1B, Change 1)

Internal guidelines

Guidelines: (a) based on general and topical guidelines; (b) developed and issued by an organization for use primarily within the issuing organization; and (c) approved by DP-32. (5650.3, Change 1)

Internal review

An examination of practices, procedures the responsible organization in sufficient detail to assure that the system is appropriate and is performing as intended. (5633.3, Change 1)

Internal transfer

Transfers of nuclear materials within the same reporting identification symbol. (5633.3)

International agreement

1: An agreement between the United States or an entity thereof, and a foreign country or an entity thereof, or an international organization or an entity thereof, to cooperate in an endeavor of common interest. Included are agreements of specific types, such as umbrella agreements, project agreements, implementing agreements, cooperative agreements, protocols, memoranda of understanding, and contracts providing for cooperative endeavors. (1240.2A); 2: In the context of this Order, an International Agreement is an instrument between the United States and another country or international organization. International agreements involving DOE as a party are concluded with counterpart agencies or organizations. Whether an agreement is an international agreement requiring consultation with the State Department is detailed in 22 CFR Part 181. The following are examples of International Agreements:

- (a) **Agency-to-agency agreement** Normally denotes an agreement between DOE and a foreign Ministry or other government or quasi-government institution. Most bilateral Agreements that DOE prepares fall in this general category.
- (b) **Government-to-government agreement** Means any agreement concluded between national governments as parties rather than agencies within those governments. Government to government agreement are signed by the Secretary of State or his designee. Science and Technology umbrella agreements are normally of this type.
- (c) **Implementing agreement/project agreement/annex** A subordinate agreement. It defines the terms and conditions for specific cooperation within the constraints of the relevant umbrellas agreement. It defines the specific scope, ranging from specific technical exchanges to joint projects.
- (d) **Information exchange agreement** An agreement which defines the terms and conditions of a comprehensive program for exchange of scientific and technical information including printed media such as reports, machine-readable media, and magnetic tapes. These agreements may also include provisions for cooperation in information standardization and information processing technology.

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International agreement

International agreement (continued)

- (e) **Letter agreement** An agreement via an exchange of letters between the parties. A letter may also renew, implement, or otherwise be subordinate to an umbrella agreement.
- (f) **Memorandum Of Understanding (MOU)** Typically an agency to agency agreement, which often serves as an umbrella agreement. However, a MOU may be an independent or subordinate to another agreement.
- (g) **Multilateral agreement** An agreement with more than two foreign government parties, and may relate to activities sponsored by an international organization.
- (h) **Umbrella agreement** An agreement that anticipate or includes subordinate agreements, such as implementing agreements by the parties, subordinate parties or other agencies or organizations. The term is usually reserved for agreements at the agency or higher level. Certain cooperative activities authorized in the umbrella agreement, such as personnel or information exchange, may normally be conducted without a further implementing agreement.

(5800)

International nuclear materials tracking system

A data base and information support system used to manage information on the quantity and location of U.S.-supplied nuclear materials in foreign countries. (5633.4) (5633.5)

International system of units

The system popularly known as the modernized metric system is a coherent system of units based upon and including the meter (length), kilogram (mass), second (time), kelvin (temperature), ampere (electric current), candela (luminous intensity) and mole (amount of a substance). The radian (plane angle) and the steradian (solid angle) are supplemental units of the system. (5900.2)

Interrogatories

Written questions drawn up for the purpose of being propounded to a party, witness, or other persons having information of interest in the case. (2200.11)

Intra-agency agreement

The contractual document between DOE and the power administrations for the purchase of utility services. (4540.1B)

Intraline separation (barricaded)

The minimum quantity-distance separation allowed between buildings as described in the paragraph below when an effective barricade (as defined in DOD 6055.9) is interposed between buildings. This distance is one-half the unbarricaded intraline separation. This distance (corresponding to approximately 82.7 Kpa (12 psi) peak overpressure for Class 1.1 explosives) shall be determined based on the maximum explosives weight, using the tables in DOD 6055.9. (6430.1A)

Intraline separation (unbarricaded)

The minimum quantity-distance separation allowed between explosives buildings on a plant site unless equivalent protection to personnel and property is provided by building design and construction, or a barricade, as noted in the paragraph above. This distance (corresponding to approximately 24 kPa (3.5 psi) peak overpressure for Class 1.1 explosives) shall be determined based on the maximum explosives weight, using the tables in DOD 6055.9. (6430.1A)

In transit

The physical movement of a nuclear weapon, a component of a nuclear weapon, or nuclear material from one part of a facility to another part of a facility or from one facility to another facility. An item is considered "in transit" until it has been relinquished to the custody of the authorized recipient at its ultimate destination. An item in temporary storage pending shipment to its ultimate destination is in transit. (5650.3, Change 1)

Intrusion alarm system (perimeter or interior)

Detection hardware and/or software comprised of sensors, alarm assessment systems, and alarm reporting systems—including alarm communications and information display equipment. (5632.1A) (6430.1A)

Inventory

1: A complete, detailed, descriptive record of classified document holdings with the capability of making it consistent or compatible with documents or hand (reconciliation); the act of comparing documents to records of holdings. (5635.1A);

continued on next page

Inventory

Inventory (continued)

2: (a) Book inventory—the quantity of nuclear material present at a given time as reflected by accounting records; (b) physical inventory—the quantity of nuclear material which is determined to be on hand by physically ascertaining its presence using techniques that include sampling, weighing and analysis. (5633.3, Change 1)

Inventory difference

The algebraic difference between the nuclear material book inventory and a physical inventory. (5633.3, Change 1)

Inventory of assessable units

An annual listing prepared by the Office of Controller which identifies the programs and administrative functions which are subject to vulnerability assessments and internal control evaluations. (1000.3B)

Inventory reconciliation

The process of comparing and adjusting the book inventory to the physical inventory. (5633.3, Change 1)

Inverted siphon

A pressure pipeline crossing under a highway or other obstruction. (6430.1A)

Investments with integrated contractors

The net assets of DOE in the possession of designated cost-type contractors whose accounts are integrated with those of DOE. The entries made by DOE organizations in their reciprocal accounts are discussed in DOE 2200.10, Accounts, Codes and Illustrative Entries. The integration of contractor accounts with those of DOE and the use of reciprocal accounts by the integrated contractors are discussed and explained in DOE 2200.6, Financial Accounting, Chapter II, Advances, Prepaid Expenses, and Other Assets. (2200.4)

Invoice receipt date

The date on which the invoice is actually received in the office designated in the contract or purchase order to receive invoices. (2200.4)

Invoices

Documents requesting payment for work performed, goods and services delivered, or costs incurred. There is an exception to this definition: the documents serve only as notification of costs incurred when DOE is performing work for non-Government customers and advance payment has been received. (2200.4)

Ion exchange

A chemical reaction used in water or wastewater treatment processes in which mobile hydrated ions of a solid are exchanged with ions of like charge in solution. (6430.1A)

IRB approval

The determination of the IRB that the research has been reviewed and may be conducted at an institution or facility within the constraints set forth by the IRB and by other institutional and Federal requirements. (1300.3)

Irradiated material

Nuclear material that has been exposed to radiation and that consequently delivers an external radiation dose rate requiring special containment, handling, and measurement procedures because of the penetrating-radiation levels. (5633.3, Change 1)

Isokinetic

Describes a condition that prevails when the velocity of air entering a sampling probe held in the airstream is identical to the velocity and axis of flow of the airstream being sampled at that point. (5400.XY)

Isolation zone

An area surrounding a protected facility that has been cleared of any objects that could conceal vehicles or individuals, and that affords unobstructed observation of, or other means of detection of entry into the area. (6430.1A) (5632.1A)

Item

A single piece or container of nuclear material, which has a unique identification and previously determined nuclear material mass, whose integrity can be visually verified. (5633.3, Change 1)

DOE ORDER DEFINITIONS

J

Job analysis

A description of the physical and mental requirements necessary to the successful and reliable performance of assigned duties. This will include both routine and emergency assigned duties, a description of the presence of physical stress factors, toxic agents, ionizing or non-ionizing radiation, and/or other known or potential work stress factors, and also a description of the credible effects that could occur due to human failure on the part of the employee in the performance of assigned duties. (5480.YY)

Joint frequency distribution

The result of a frequency analysis of the probability of the occurrence of two or more random events (e.g., hydrologic or meteorological parameters). (6430.1A)

Joint Nuclear Accident Coordinating Center (JNACC)

1: A joint DOE/DOD capability at Kirtland Air Force Base, Albuquerque, New Mexico, responsible for maintaining current information on the location of specialized DOE and DOD teams or organizations capable of providing nuclear weapon accident assistance. The DOE/Joint Nuclear Accident Coordinating Center (JNACC) coordinates the activation, deployment, necessary transportation, and logistics support required by the Accident Response Group (ARG). (5530.1); 2: A joint DOE and Department of Defense capability responsible for maintaining current information on the location of specialized DOE and Department of Defense teams or organizations capable of providing nuclear weapons accidents assistance. The DOE and Department of Defense elements of Joint Nuclear Accident Coordination Center are also responsible for initiating actions to deploy response in the event of a nuclear weapon accident or significant incident. (5500.1A, Change 1)

Jumping

Leaping from a height above the zone of detection to a point at ground level across the zone of detection. (5632.1A)

Just compensation**Just compensation**

The monetary equivalent for the value of the property taken as determined by the court in condemnation proceedings. (4300.1B)

DOE ORDER DEFINITIONS

K

Karst terrain

An irregular limestone region with sinks, underground streams and caverns.
(6430.1A)

Key employee

A military reservist or a retired military person subject to recall who is assigned to a key position. (3240.1)

Key position

A position that cannot be vacated during a national emergency or mobilization without seriously impairing the capability of the organization to function effectively. Positions may be designated as key if the following characteristics apply. These characteristics are intended to be representative characteristics and are not all inclusive. Other situations may exist which will justify designating the position as a key position:

- (a) the knowledge or abilities are unique or highly specialized in nature;
- (b) the position historically has been hard to fill (exclusive of the time involved with obtaining a security clearance);
- (c) no qualified replacement would be readily available during mobilization, i.e., typical replacements are also subject to being called during mobilization; or
- (d) the position is directly associated with defense mobilization or health or safety requirements during a national emergency. This characteristic alone will not satisfy the intent of a key position.

(3240.1)

DOE ORDER DEFINITIONS

L

Label

The marking of an item of information to reflect its security classification and its set of categories that represent the sensitivity of the information. (5637.1)

Label-external

The visible and readable marking on the outside of the medium or the cover of the medium that reflects the classification and sensitivity of the information resident within the medium. (5637.1)

Label-internal

1: The marking of an item of information, to reflect the classification and sensitivity of the information, within the confines of the medium containing the information. (5637.1); 2: The life descriptor information which users enter into the file directory of the equipment. (1324.6)

Laboratory assurance

The documentation required from the prospective research performing institution assuring institutional compliance with and implementation of established regulations for the protection of human or animal research subjects. (4300.2A)

Labor surplus area concern

A concern that together with its first-tier subcontractors will perform substantially in labor surplus areas, which are geographic areas identified by the Department of Labor as areas of concentrated unemployment or underemployment or areas of labor surplus. See FAR section 20.101. (4250.1)

Land application

A disposal method for wastewater effluents and sludges. (6430.1A)

Landfill

A site for disposal of solid waste in which compacted layers are covered with soil. (6430.1A)

Landlord program**Landlord program**

The Headquarter's program having funding or institutional budget responsibility for general purpose equipment at a site. (1360.1A)

Laser eye safety distance

The minimum distance required to protect the eye from corneal or retinal damage caused by a specific laser beam. (5480.16, Change 2)

LAW hazard zone

The zone at the rear of a LAW or LAW simulator where flame, hot gases, or fragments may be present during discharge of the weapon. The hazard zone is defined as a 30 degree cone truncated at 10 feet wide by 30 feet deep at the rear of the LAW tube. (5480.16, Change 2)

LAW simulator

A weapon that simulates the firing of a LAW and emits a coded laser beam in the direction aimed. The simulator does not fire a projectile but does expel fragments and a hot flash from the rear of the launch tube. (5480.16, Change 2)

Leachate

A solution containing dissolved and finely suspended solid matter and microbial waste products produced by groundwater or infiltrating surface water movement through solid waste. (6430.1A)

Lead operations office

An operations office having special expertise and capability to manage the implementation of DOE activities in a given transportation base technology program area(s). (1540.3)

Lease

An agreement which gives exclusive possessory interest in the property for a specified time, in exchange for payment of rent to the owner. (4300.1B)

Leave donor

An employee whose voluntary written request for transfer of annual leave to the account of leave recipient is approved by the Department. (3630.2)

Leave recipient

A current employee for whom the Department has approved an application to receive annual leave from the annual leave account of one or more leave donors. (3630.2)

Legal limitation

1: A limitation imposed by law (e.g., appropriation acts, OMB apportionments, and allotments) upon the use of an appropriation or other fund. Legal limitations are identified on allotments only. See Loan guarantee commitment. (2100.4A); 2: A limitation imposed upon the use of an appropriation or other fund or subdivision thereof, having the same effects as a fund subdivision in the control of obligations and expenditures. The limitations is derived from public laws (e.g., appropriation bills) and apportionments from the Office of Management and Budget (OMB). The framework for this type of limitation is title 31, section 1517(a) of the United States Code and OMB Circular A-34. Legal limitations are identified on allotments only. A loan guarantee commitment is a legal limitation. (2200.4); 3: A restriction on the use or availability of funds that is placed on DOE in form of public laws (e.g., appropriation bills) and apportionments from OMB. The basis for this type of limitation is title 31 U.S.C., section 1514, as amended, and OMB Circular No. A-34. Legal limitations are identified on allotments only. (5100.12) (5100.14)

Legal obligation

An obligation to pay alimony and/or child support that is enforceable under appropriate State or local law. (2200.11)

Legal process

Any writ, order, summons, or other similar process in the nature of garnishment which may include an attachment, writ of execution, or court-ordered wage assignment, which is:

- (a) issued by:
 - (1) a court of competent jurisdiction, including Indian tribal courts, within any State, territory, or possession of the United States, or the District of Columbia;
 - (2) a court of competent jurisdiction in any foreign country with which the United States has entered into an agreement that requires the United States to honor such process; or
 - (3) an authorized official pursuant to an order of a court of competent jurisdiction or pursuant to State or local law.

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Legal process

Legal process (continued)

- (b) directed to, and the purpose of which is to compel, a governmental entity, to make a payment from moneys otherwise payable to an individual, to another party; to satisfy a legal obligation of the individual to provide child support and/or make alimony payments.

(2200.11)

Legal process regular on its face

A process, legal in form, from a court, an officer, or any body having authority of law to issue such a process, and that contains nothing to notify or fairly apprise anyone that is issued without authority. (2200.11)

Legal representative

A designee appointed by a requester to act or represent the requester. (1800.1A)

Legal violation

The status of an over obligation or over expenditure of a legal funding limitation that has been investigated and determined to be an actual violation. Legal violations are reportable to the President and Congress. (2200.4)

Less Than Detectable (LTD)

Refers to a measurement or calculated concentration that is not statistically different from the associated background or control value at a preselected confidence level. (5400.XY)

Letter agreement

An agreement via exchange of letters between the parties. A letter may also renew, implement, or otherwise be subordinate to an umbrella agreement. (5800)

Letter of authorization

An original letter, printed on letterhead stationery, which authorizes an individual to hand-carry classified matter and which specifically exempts such matter from opening and inspection by air terminal security screening personnel. This letter is intended only for display to air terminal authorities. (5635.3)

Letter of credit

A commitment, certified by an authorized official of a Federal program agency, specifying a dollar limit available to a designated payee. A period of availability may also be specified. (2200.4)

Level of protection

The degree of safeguards and security provided to protect Departmental interests. (5630.13)

Liabilities

Amounts owed for items received, services rendered, expenses incurred, assets acquired, construction performed (regardless of whether invoices have been received), and amounts received but as yet unearned. Included are amounts owed for goods in the hands of contractors under the constructive delivery concept (when the records of the agency provide such information) and amounts owed under grants, pensions, awards, and other indebtedness not involving the furnishing of goods and services. Liabilities may be classified into two groups.

- (a) **Current liabilities** Amounts owed to others within 1 year for items received, services rendered, expenses incurred, assets acquired, construction performed (regardless of whether invoices have been received), and amounts received but as yet unearned. Included are amounts owed for goods in the hands of prime contractors under the construction delivery concept. Although liabilities rest generally on legal rights and duties, a legal claim is not a prerequisite for qualifications as a liability if future cash or other transfer of assets in settlement is otherwise probable and estimable.
- (b) **Long-term and unfunded liabilities** Debts payable to others that are not payable or due within 1 year. Includes bond debts, notes payable, and liabilities that will not become obligations until later (for example, accrued annual leave in the case of appropriation accounts). If funds for payment have not been provided or authorized, amounts owed are recorded as unfunded liabilities.

(2200.4)

Library

Library

Any Departmental organization which services the information requirements of a specific clientele; maintains reference and/or circulating collections of books, journals, reports, and/or other publications; and offers some or all of the user services included under "Library Services" below. This does not include the information gathering and dissemination activities intrinsic to a technical information facility such as the Department's Office of Scientific and Technical Information. (1430.4)

Library manager

A DOE organizational manager whose responsibilities encompass functions defined under the definition for Library. (1430.4)

Library services

User services provided by a library may include: acquiring and circulating commercially published books, journals, newsletters, newspapers, update services, and other publications or materials; arranging for organizational memberships; acquiring and circulating technical reports after their initial distribution; accessing and searching bibliographic and non-bibliographic databases; providing reference and referral services; arranging inter/intra library loans, and foreign language document translation; disseminating and controlling classified documents; and interfacing where appropriate with the library and information community. (1430.4)

License

A privilege to use or pass over property for a specified purpose. (4300.1B)

Lien

A claim against the property to satisfy a debt. (4300.1B)

Life cycle cost

1: All costs except the cost of personnel occupying the facility incurred from the time that a space requirement is defined until that facility passes out of the government's hands. (6430.1A); 2: The total of the direct, indirect, recurring, nonrecurring, and other related costs incurred or estimated to be incurred in the design, development, production, operation, maintenance, support, deactivation, and/or disposition of a project or system over its anticipated useful life span. For example, if a demonstration project is operated beyond the demonstration period, those costs are also included in the life cycle cost estimate. Where system or project planning anticipates use of existing sites or facilities, restoration and refurbishment costs should be included. (5700.2C)

Life cycle cost analysis

The calculations necessary to determine the total cost of owning, operating, and maintaining a facility over its useful life, including its fuel/energy costs, determined on the basis of a systematic evaluation and comparison of alternative building systems. In the case of leased facilities, the life cycle cost shall be calculated over the effective remaining term of the lease. (4330.2C)

Light Anti-tank Weapon (LAW)

A portable, shoulder-fired, recoilless weapon capable of launching explosive projectiles. (5480.16, Change 2)

Limited area

A security area for the protection of classified matter where guards, security inspectors, or other internal controls can prevent access by unauthorized persons to classified matter. See DOE 5632.4 for further information. (5637.1) (6430.1A)

Limited competition

A procurement that limits the type of equipment (e.g., plug compatible, software compatible, make and model) allowed to be bid in response to a solicitation. (1360.1A)

Limited quantities of radioactive materials

Excepted from packaging, marking, and labelling are described in 49 CFR 173.421. (5480.3)

Limit of error

The boundaries within which the value of the attribute being determined lies within a specified probability. The boundaries are defined to be plus or minus twice the standard deviation of the attribute unless otherwise stipulated. (5633.3)

Line organization

1: Includes the program Secretarial Officer, the program office, and the field organization responsible for the management of a given DOE operation. (5480.4, Change 1);

continued on next page

Line organization

Line organization (continued)

2: That unbroken chain of command which extends from the Secretary through the Under Secretary, to the Program Senior Officials (PSO) who set program policy and plans and develop assigned programs, to the field organization managers who are responsible to the PSO for execution of these programs, and to the contractors who conduct the programs. Environment, Safety, and Health are integral parts of each program. Accordingly, line management responsibility for ES&H functions flows from the Secretary through the Under Secretary, to the PSO, to the field organization managers, to the contractors. (5481.1B, Change 1) (5482.1B) (5480.1B) (5480.YY) (5480.XX); 3: The chain of command which extends from the Secretary through the Under Secretary, to the Heads of Headquarters Elements who set program policy and plans and develop assigned programs, to the field organization managers who are responsible to the Heads of Headquarters Elements for execution of these programs, to the contractors who conduct the programs. Safeguards and Security is an integral part of each program. Accordingly, line management responsibility for S&S functions flows from the Secretary through the Under Secretary, to the Heads of Headquarters Elements, and the field organization managers, to the contractors. (5630.11)

List of eligible facilities

A list, provided to the IAEA by the U.S. of all facilities within the U.S. not associated with activities of direct national security significance. (1270.2A)

Live load

A moving load or a load of variable force acting on a structure, in addition to its own weight. (6430.1A) (5610.11)

Live pit

A fissile component, or set of fissile components, designed to fit in the central cavity of an implosion system and which if placed therein will create a nuclear explosive. (5610.11)

Live round excluder

An obstructive device mounted in the cylinder of an ESS revolver or the breech of other ESS weapons, permitting chambering and firing of blank ammunition by preventing chambering of a live round. (5480.16, Change 2)

Load factor

The strength-to-service-load ratio. (6430.1A)

Loan guarantee commitment limitation

Loan

A disbursement of funds by DOE or other lender (not in exchange for goods or services) that is contracted to be repaid with or without interest; for example, a drawdown against a loan made under either a loan agreement or loan guarantee agreement. (1332.1A)

Loan guarantee

1: An agreement by which the Government pledges to pay part of or all of loan principal and interest to a lender or holder of a security, in the event of default by a third-party borrower. For the purpose of credit control, the term includes agreements in the form of loan insurance (i.e., a program to pool risks) pledging the use of insurance premiums and, under some circumstances, other resources to secure a lender against default by a borrower. The term also includes direct Federal loans that the Government has sold under guarantee or repurchase agreements. The maximum amount of the Government's liability must be stated in the loan guarantee agreement. (2200.4) (2100.4A); 2: An agreement by which DOE pledges to pay part or all of the loan principal and interest to a lender or holder of a security in the event of a default by a third party borrower. The term also includes loans DOE has sold under guarantee or repurchase agreements. (1332.1A)

Loan guarantee commitment

The gross amount of loan guarantees committed during a fiscal year or other period, without reductions for such items as repayments, prepayments, sale of guaranteed loans, or defaults. A loan guarantee is counted against the annuator aggregate limitation when a firm commitment is made, i.e., when the Government enters into a guarantee agreement to become effective at such time as the borrower meets stipulated preconditions. A commitment must be recorded for every loan guaranteed even though the commitment and the actual guarantee may occur simultaneously. Where the principal amount of a loan is guaranteed partially by the Government, only the amount of the Government's contingent liability is to be recorded. (2100.4A) (2200.4)

Loan guarantee commitment limitation

The gross amount of loan guarantee commitments allowable during a fiscal year or other time period. The limitation is normally at the allotment or appropriation level. A violation of a loan guarantee limitation at the allotment or appropriation level represents a violation of a legal limitation. (2100.4A) (2200.4)

Long range plan**Long range plan**

A written description of the strategy for implementing the Classified Computer Security Program that covers the 5 years beginning at the date of the plan. (5637.1)

Long term

A period of time in excess of 1 year. (4540.1B)

Low-cost storage

Facilities specially designed for storage of records. Includes records holding areas and Federal Records Centers. (1324.2A)

Lower Limit of Detection (LLD)

The smallest amount of a contaminant that can be distinguished in a sample by a given measurement procedure at a given confidence level. (5400.XY)

Low-Level Waste (LLW)

1: Radioactive waste not classified as high-level waste, TRU waste, spent nuclear fuel, or by-product material, as defined by DOE 5820.2A. (6430.1A);
2: Waste that contains radioactivity and is not classified as high-level waste, transuranic waste, or spent nuclear fuel or (2) by-product material as defined by this Order. Test specimens of fissionable material irradiated for research and development only, and not for the production of power or plutonium, may be classified as low-level waste, provided the concentration of transuranic is less than 100 nCi/g. (5820.2A)

Low specific activity

Material of low radioactivity level such as ores and chemical concentrations of those ores. The low specific activity definition is in 49 CFR 173.403. (5480.3)

DOE ORDER DEFINITIONS

M

M-3479

A standard distribution list for classified scientific and technical reports, administered by the DOE Office of Scientific and Technical Information. (5635.1A)

"M" account

Unliquidated obligations under an appropriation are transferred to (merged into) an M account at the end of the second full fiscal year after expiration. The M account remains available for the payment of the unliquidated obligations charged to various years' appropriation accounts that have been merged. (2200.4)

Machine gun

A fully automatic weapon capable of firing multiple rounds with a single pull of the trigger; it is belt-fed and is usually mounted on a bipod, tripod, or another fixture. (5480.16, Change 2)

Machine-readable records

Machine-readable records are records that require machine processing and decoding for conversion to human readable information. Examples of machine-readable records include magnetic tape, disc packs, floppy discs, tabulating cards, punched cards, paper tape, drums, and optical discs. (1324.2A)

Magazine

1: A mechanical device used to hold a predetermined number of cartridges in position for feeding into a weapon. (5480.16, Change 2); 2: Any building or structure, except an operating building, used for the storage of ammunition or explosives. A storage area containing magazines shall be located at not less than an inhabited building separation from other areas, such as operational explosives buildings, administration/office buildings, shop, and installation boundaries. (6430.1A)

Magazine separation

Magazine separation

The minimum quantity-distance separation between magazines (not including service magazines) within a storage area. Siting of magazines within a storage area with respect to one another and location of facilities such as guard shelters and loading docks in storage area are covered in DOE 6055.9. Maximum explosives weight shall be used in determining separation distances. (6430.1A)

Main charge

The high explosive whose explosive energy implodes the pit. (5610.11)

Maintenance

1: The aggregate of those planned and systematic actions required to preserve and promptly restore operability, reliability, and availability of, or to prevent the failure of: plant, structures, systems, and components. (5480.MAINT); 2: The function of keeping property in a predetermined condition so that it can effectively and safely be utilized for a designated purpose. (4330.4)

Maintenance management

The administration of a program utilizing such concepts as organization, planning, procedures, scheduling, cost control, and evaluation for the effective performance and control of maintenance with adequate provisions for interfaces with other concerned disciplines such as health, safety, and security. (4330.4)

Maintenance, repair, and operating supplies

Supplies which are required for maintaining, repairing, and operating a facility, including minor alterations necessary to maintain or repair but not to increase the capacity of the facility. (5560.1A)

Major disagreement

Any instance in which the IG disagrees with the response to an IG report and deems the differences to be significant. (2300.1A)

Major international conference

A scheduled conference or meeting involving representation from three or more nations and involving 10 or more official foreign travel attendees. (1500.3)

Major item of ADPE

A major item of ADPE refers to the acquisition of an ADPE component or group of ADPE components that has a purchase equivalent value of \$1,000,000 or more. The determining threshold level for a major item of ADPE is whether the purchase equivalent value is \$1,000,000 or more irrespective of the actual method of acquisition (purchase, lease, or lease/purchase combination) or the type of funding used. Thus, an item of leased ADPE is a major item of ADPE if the purchase equivalent value is \$1,000,000 or more even if the annual lease costs are less than \$1,000,000.

- (a) For new items of ADPE, the purchase equivalent value is based upon list, anticipated, or actual purchase price.
- (b) For used items of ADPE OR reutilization of DOE-reassigned, Government excess, or exchange/sale ADPE, the purchase equivalent value is based upon the current best estimate market value.

(1360.1A)

Major item of equipment

Any item of capital equipment not related to construction or a group of Automatic Data Processing (ADP) components (e.g., a computer system) having a total estimated purchase value of \$1,000,000 or more, including related capitalizable costs. Note: the determining factor for a major item of equipment is the estimated purchase value of the item(s) regardless of whether the actual method of acquisition is purchase, lease, or some combination of the two. Thus, a leased item of equipment is a major item of equipment if the estimated purchase equivalent value of the item is \$1,000,000 or more, even if the annual lease cost is less than \$1,000,000.

(5100.14)

Malevolent act

An illegal action, or an action that is committed with the intent of causing wrongful harm. (5634.1A)

Management and Operating (M&O) contract

Management and Operating (M&O) contract

1: An agreement under which the Government contracts for the operation, maintenance, or support, on its behalf, of a government-owned or controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of the contracting federal agency FAR subpart 17.6, and DEAR subpart 917.6. (3890.1); 2: An agreement under which DOE contracts for the operation, maintenance, or support, on its behalf, of a government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of DOE (source: FAR 7.601). The term does not necessarily include all prime contracts providing for work to be performed at DOE-owned or -leased facilities. A listing of M&O contracts, not necessarily current, can be found as an attachment to DOE 5700.7B, Work Authorization System, of 9-24-86, or as an appendix to the most recent edition of the "DOE Annual Procurement and Financial Assistance Report," (the edition reporting on FY 1987 is publication DOE/MA-0318). Further information as to the identification of M&O contracts can be obtained from the Office of Procurement and Assistance Management, Office of Clearance and Support—PR-30. (1300.3) (3220.6); 3: Those designated by the Secretary in accordance with DOE policies. (4300.2A)

Management and Operating (M&O) contractor(s)

1: Contractors who manage or operate laboratories, production plants, or research facilities; or, onsite service contractors who perform services of a continuing nature at Department-owned or -controlled sites, as defined in Federal Acquisition Regulation 17.601. The word "contractor" as used in this Order means management or operating contractor. (3220.3); 2: Contractors designated by the Secretary in accordance with DOE policies. Management and operating contractors' accounting systems are, for the purposes of the accounting overview directives, limited to those integrated with DOE's accounting system. See Integrated contractors. (2200.4); 3: Those designated by the Secretary as an M&O contractor in accordance with DOE policies. (4300.2A) (1300.3) (5700.7B, Change 2)

Management Control Plan (MCP)

Management appraisal

1: A documented determination of managerial effectiveness in establishing and implementing quality assurance program plans which conform to Departmental policy requirements. It is based on an analysis of functional appraisals, internal audits, and other information, and on the application of appropriate criteria. It is a review and evaluation of management performance covering all quality assurance and management responsibilities to assure proper quality assurance program balance. (5700.6B); 2: A documented determination of managerial effectiveness in establishing and implementing ES&H program plans which conform to DOE policy requirements. It is based on an analysis of functional appraisals, internal appraisals, and other information, and on the application of appropriate criteria. The appraisal is a review and evaluation of management performance covering all ES&H disciplines and management responsibilities to assure proper program balance. (5482.1B)

Management control

The means by which the Government seeks to ensure that Government management functions are not performed by contractors. These controls may be considered adequate when provisions have been made to ensure that:

- (a) the Government has adequate basic management resources and technical core capabilities available in-house to make the value judgments and exercise the discretionary authority required to retain control by the government; and
- (b) government personnel review the work of support service contractors at each stage of contract performance when value judgments must be made or discretionary authority must be exercised in order to retain control by the Government. Necessary decisions are made by Government personnel.

(4200.3B)

Management Control Plan (MCP)

A summary document that displays the current vulnerability ratings, identified needed improvements, responsible officials and planned actions over a 5-year period. Its purpose is to provide the management information needed to plan and direct the Departmental Element's internal control program. (1000.3B)

Management control systems

Management control systems

The planning, scheduling, budgeting, estimating, work authorization, cost accumulation, performance measurement, and other systems used by a contractor to plan and control the cost and scheduling of work. (2250.1C)

Management review

1: Refers to a review and examination of records, activities, policies, and procedures established by operations offices and other designated offices to manage and coordinate unclassified computer security programs which are established by sites under their cognizance. This review is normally conducted by Headquarter's personnel with Departmental program management responsibilities. (1360.2A); 2: For the purposes of this Order, is an evaluation of a program or administrative function and must include an evaluation of internal controls. It focuses on the areas of concern identified during vulnerability assessments or those areas of highest risk within an assessable unit as identified by management. It covers internal controls which are significant to the area under review. It is carried out in accordance with specified criteria contained in DOE Orders or is performed independently. It should encompass the GAO Standards for internal controls. It includes the performance of testing. It results in a written report that documents the evaluation process followed and contains specific recommendations regarding any necessary actions or deficiencies discovered. (1000.3B)

Manager

An individual in a position which requires the incumbent to:

- (a) direct the work of an organization;
- (b) be held accountable for the success of specific line or staff programs, projects, functions, or activities;
- (c) monitor the progress of the organization toward goals and periodically evaluate and make appropriate adjustments; and
- (d) perform a full range of managerial duties and responsibilities. Typically, a manager is in the GM-13 to GM-15 grade range or above and directs a subordinate supervisory staff.

(3410.1B, Change 1)

Managers

Senior executive service and merit pay or equivalent employees with significant management responsibility, including fulfillment of assigned internal control responsibilities. (2200.4)

Managers of operations offices

Means the Manager of a DOE operations office, the Manager of Pittsburgh Naval Reactors Office, the Manager of Schenectady Naval Reactors Office, and at Headquarters, the Director of Safeguards and Security (DP-34). (5631.2B)

Mandatory standards

Those standards of this Order adopted by DOE that define the minimum requirements that DOE and its contractors must comply with to the extent they apply to the activities being conducted. (5480.4, Change 1)

Manufacturer/system designation

A 10-character code where the first 3 characters identify the manufacturer and the next 7 characters identify the system designation as established by the manufacturer. (1360.6)

Marginal costs

The change in total costs resulting from a unit change in output. (5660.1)

Mask(ing)

The interposition of friendly personnel in the line of fire between other friendly personnel and the adversary. (5632.1A)

Mass concrete

A large volume of cast-in-place concrete with dimensions large enough to require that measures be taken to cope with the generation of heat and attendant volume change and to minimize cracking. (6430.1A)

Master copies for reproduction

Master copies are such items as ditto stencils, photostatic negatives, Multilith plates, and other reproduction master copies which are used for large-scale reproduction. (5635.1A)

Master facility register

Central record index maintained by DP-34 of all security facilities under the administrative jurisdiction of Department Elements. (5634.1A)

Master Safeguards and Security Agreement (MSSA)

Master Safeguards and Security Agreement (MSSA)

- 1: An agreement between Headquarters and the field element that defines protection levels and strategies for a facility or security interest. (5632.1A);
- 2: A formal agreement between the responsible DOE Headquarters and field elements regarding the safeguards and security interests to be protected, the prescribed levels of protection, the accepted risk, and the plans to increase protection system effectiveness, if required. (5630.13)

Material

- 1: Any raw, in-process, or manufactured commodity, equipment, component, accessory, part, assembly, or product of any kind. (5632.1A);
- 2: Any material, hazardous or nonhazardous, or article which requires transportation to, from, or between DOE facilities for which DOE pays or reimburses transportation charges. (1540.1);
- 3: (a) A chemical or metallic substance, including metals; (b) a fabricated or processed item; or (c) machinery and equipment. (5635.1A)

Material access area

An area which contain(s)/containing a Category I quantity of Special Nuclear Material (SNM) and is specifically defined by physical barriers, located within a protected area, and subject to specific access controls. (6430.1A) (5633.3) (5632.1A)

Material accountability alarms

Alarms resulting from material control indicators (e.g., Shipper/Receiver Difference, Inventory Difference, Normal Operating Loss, etc.) exceeding established control limits. (5633.3)

Material Balance Area (MBA)

A subsidiary account of a facility designed to establish accountability and to localize inventory differences. (6430.1A) (5633.3)

Material control alarm

Alarms from loss detection elements (e.g., SNM monitors, material surveillance) which may indicate abnormal situations and/or unauthorized use/removal of nuclear material. (5633.3)

Material control and accountability

That part of safeguards that detects or deters theft or diversion and provides assurance that all nuclear materials are present. (5633.3)

Material surveillance procedures

Material control and accountability plan

A document description of a site or facility's MC&A program. The MC&A plan may be presented as a separate document or incorporated as part of another document. (5633.3)

Material control indicators

Discrepancy indicators provided by the accounting system that signify abnormal conditions. (5633.3)

Material custodian

An individual assigned responsibility for the control of nuclear material in a localized area of a facility. The localized area should be limited, where practical, to a single material balance area. (5633.3)

Material handler

Any person authorized to work with nuclear materials. (5633.3)

Material needed improvements

Those internal control matters that, unless corrected, can impair the fulfillment of a Departmental Element's mission, deprive the public of needed services, violate statutory or regulatory requirements, result in a conflict of interest, create adverse publicity, require the personal attention of the Secretary, endanger national security, or cause harm, even though minor individually, because they are extensive in the aggregate—These are also referred to as material weaknesses. (1000.3B)

Material nonconformances on financial management systems

Material nonconformances are those variances from the Comptroller General's principles and standards as implemented through OMB Circular A-127 that could have a significant adverse effect on external reporting or internal management decisions. (1000.3B)

Material surveillance procedures

Procedures to assure the observation of an area containing SNM by at least two cleared and knowledgeable authorized persons who may be doing other work but who can give an alarm in time to prevent the unauthorized removal or diversion of the SNM or an act of sabotage involving SNM. One of the persons who maintains such surveillance must be "Q" cleared. The other must possess at least an "S" or "L" access authorization unless the surveillance entails access to Secret Restricted Data, in which case the other person must also possess a "Q" access authorization. If the surveillance entails access to Confidential Restricted Data, then an "L" access authorization is required. (5632.1A)

Materials management plan

Materials management plan

A planning document prepared annually that provides analyses of available nuclear materials and those required over the ensuing multi-year planning period. (5660.1)

Matter

1: Documents, information, or material. (5632.1A); 2: Information in tangible form (i.e., material or documents). (5635.1A)

Maximal effective pressure

The highest of: (a) the peak incident pressure; (b) the incident plus dynamic pressure; or (c) the reflected pressure. (6430.1A)

Maximum credible loss

The maximum loss that could occur from a combination of events resulting from a single fire. Considerable judgment is required to evaluate the full range of potential losses, but in general, readily conceivable fires in the sensitive areas are considered. Examples are power wiring failures in cable trays, flammable liquid spills, and high-value parts storage areas or combustible exposures to sensitive machines. Any installed fire protection systems are assumed to function as designed. Due to the uncertainties of predicting human action, the effect of emergency response is generally omitted except for post-fire actions such as salvage work, shutting down water systems, and restoring production. (5480.7)

Maximum normal operating pressure

The maximum gauge pressure that is expected to develop in the containment vessel under the normal conditions of transport. (5480.3)

Maximum possible fire loss

The maximum possible loss that could occur in a single fire area assuming the failure of both automatic and manual fire extinguishing actions. (5480.7)

Maximum probable flood

A hypothetical flood (peak discharge, volume, and hydrograph shape) that is considered to be the most severe reasonably possible, based on comprehensive hydro-meteorological applicant of probable maximum precipitation and other hydrological factors favorable for maximum flood runoff such as sequential storms and snowmelts. (6430.1A)

Meals and Incidental Expenses (M&IE) allowance

Refers to a fixed allowance for meals and incidental expenses related to subsistence such as laundry, drycleaning, tips, telegrams and telephone calls to reserve lodging; and when not approved as a necessary transportation expense, those charges for transportation between places of lodging or business and places where meals are taken. It is payable to the traveler without itemization of expenses or receipts. (1500.33)

Measured value

A quantitative characteristic and its associated uncertainty that has been determined for nuclear materials. (5633.3)

Measurement

The accurate quantification of a parameter, a contaminant, or gross content of radioactive material associated with a liquid or air-borne effluent stream. (5400.XY)

Measurement control

The procedures and activities used to ensure that a measurement process generates measurements of sufficient quality for their intended use. (5633.3)

Measurement error

The error attributable to the measurement process. (5633.3)

Measures of central tendency

Measures of the tendency of values within a set of data to be centered at some location (e.g., median, mode, arithmetic mean, and geometric mean). (5400.XY)

Measures of dispersion or variability

A measures of the differences, scatter, or variability of values within a set of numbers. Commonly used measures of the dispersion or variability are the range, standard deviation, variance, and coefficient of variation. (5400.XY)

Median

The middle value of a set of data when the set of data are ranked in increasing or decreasing order. If there are an even number of values in the set, the median is the arithmetic average of the two middle values; if the number of values is odd, it is the middle value. (5400.XY)

Medical

Medical

The term includes the physical, mental, emotional and behavioral status of the employee or applicant; the diagnosis, treatment, and management of substance abuse; and the medical specs for employee assistance and rehabilitation programs. (5480.YY)

Medical emergency

A medical condition of an employee, or a member of the employee's family, that is likely to require the employee's absence from duty for a prolonged period of time and to result in a substantial loss of income to the employee because of the unavailability of paid leave. (3630.2)

Medical examination

An evaluation of present health status and health risk factors by means of an historical review, physical examination, appropriate laboratory tests and measurements, and appropriate personality, behavioral, and mental health evaluations. (5480.YY)

Members of the public

1: Persons who are not occupationally associated with the DOE facility or operations, i.e., persons whose assigned occupational duties do not require them to enter the DOE site. Also see Dose terms: Public dose. (5400.5, Change 1); 2: Individuals who have no work-related reason for entry to a DOE controlled area. (5480.3A)

Membrane filter

One of several commercially available filter media consisting generally of very thin organic-based films having a range of selectable porosities and controlled composition. Very thin, porous metallic filters are also known as membrane filters. (5400.XY)

Metrication operating committee

Memorandum of understanding

A written agreement broadly stating basic understandings and describing a mechanism for coordinating activities to be engaged in by the Department and other signatory authorities. It is not limited to understanding with Federal agencies and also may include local, state, international, and other government entities; the private sector; and educational institutions. A memorandum of understanding may be written for some interagency agreements to document agreements that are being or have been established to assist DOE in meeting its Department-wide, programmatic, or other government entities; the private sector; and educational institutions. Agreements between Departmental organizations are not considered memorandums of understanding. A memorandum of understanding is not a binding contract; it cannot be used to obligate or commit funds or as the basis for the transfer of funds from one agency to another. If a commitment, obligation, or transfer of funds is required, a specific reimbursable agreement must be developed between DOE and the participating organization to provide specific funding, obligation, and billing data. (2200.4)

Message

A document transmitted by teletype, telegraph, facsimile, or other electrical means. (5635.1A)

Metes and bounds

A description of the property in which boundaries are described by directions and distances from a point of beginning. (4300.1B)

Metrication

An activity tending to increase the use of the International System of Units (SI). It may include metric training and the initiation or conversion to metric of new or existing measurement sensitive processes, software or hardware systems, and engineering standards. (5900.2)

Metrication operating committee

A committee of the Interagency Committee on Metric Policy, which serves as the vehicle for coordination of Federal interagency metrication activities, and recommends policy guidance to the parent committee. The Metrication Operating Committee is comprised of representatives from the major Federal departments and agencies who serve as their agencies' metric coordinators. (5900.2)

The Metrification Policy Committee

The Metrification Policy Committee

A committee with representatives from each major Headquarters element, established to develop a Department wide policy. The representatives also serve as the metric coordinators for their organizations. (5900.2)

Metrification program plan

A summary description of the metrification objectives, the actions required to attain the stated objectives, and the actions underway or planned for this purpose consistent with national policy, interagency metric policy, Department policy, and organizational element policy. (5900.2)

Metric system

The International System of Units (SI) as established by the General Conference on Weights and Measures in 1960 and as interpreted or modified for the United States by the Secretary of Commerce. (5900.2)

Microcomputers (personal computers)

The smallest class of computers, using microprocessors for their central processing unit, which are capable of performing a wide variety of analytical, computational, and text processing applications, and which are most typically operated directly by their end users. (1360.1A) (1360.7)

Microfiche

A sheet of microfilm containing multiple microimages in a grid pattern. (1324.4)

Microfiche/microfilm

Film, photo card, or flat negative containing microimages. (5635.1A)

Microfilm

(a) Raw (unexposed and unprocessed) film with characteristics that make it suitable for use in micrographics. (b) The process of recording microimages on film. (c) A fine-grain, high resolution photographic film containing an image greatly reduced in size from the original. (1324.4)

Microform

A term used for any form containing microimages. (1324.4)

Micrographics

The science and technology of document and information microfilming and associated microform systems. (1324.4)

Minimum requirements and standards

Micrographic system

A configuration of equipment and procedures for the production, reproduction, maintenance, storage, retrieval, display, or use of microforms. (1324.4)

Micropublishing

1: Publications produced in miniaturized image format for general distribution as a substitute for conventionally printed material. Microfilming of administrative records is not considered micropublishing. (1340.1A); 2: The production of microforms for distribution outside the originating organization. Administrative records, accounting reports, or similar items are not included in this definition. (1324.4)

MIE number

A unique code assigned to a major item of ADPE for long-range planning. It consists of the letter abbreviation of the site, separated by a dash from the last two digits of the fiscal year of proposed acquisition, followed by a dash and a sequential number—e.g., ANL-90-6. (1360.1A)

Migration

The movement of hazardous substances from the disposal site by means of air, surface water, or groundwater. (5480.14)

Minimal risk

Means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. (1300.3)

Minimum Detection Level (MDL)

The minimum concentration of the constituent or species of interest that can be observed by an analytical instrument and distinguished from instrument noise with a specified degree of probability. (5400.XY)

Minimum fragment distance

The minimum distance required for the protection of personnel in the open, inhabited buildings, and public traffic routes from hazardous fragments. (5480.16, Change 2)

Minimum requirements and standards

The program content necessary to satisfy the policies and objectives of this directive. (5480.8)

Minnesota Multiphasic Personality Inventory (MMPI)

Minnesota Multiphasic Personality Inventory (MMPI)

A personality questionnaire yielding scores which convert into diagnostic categories of mental or emotional disorders. (5480.YY)

Miscellaneous receipts

Moneys received for the use of the United States. These receipts are deposited in the Department of the Treasury general fund. Collections representing refunds of payments made previously (appropriations refunds) are not miscellaneous receipts. See Fund: Federal, General. (2200.4)

Misfire

Any cartridge, missile, or rocket that does not properly fire when triggered. (5480.16, Change 2)

Mission-essential unclassified information

Plain text or machine-encoded unclassified data that, as determined by competent authority (e.g., information owners), has high importance related to accomplishing a DOE mission and requires a degree of protection because unnecessary delays in processing could adversely affect the ability of an owner organization, site, or the Department to accomplish such missions. (1360.2A)

Mixed waste

Waste containing both radioactive and hazardous components as defined by the Atomic Energy Act and the Resource Conservation and Recovery Act, respectively. (5820.2A)

"M" material

Usable excess nuclear material in a form suitable for direct introduction into production processes for which DP-13 has management responsibility. (5660.1)

Mock high explosive

A nondetonable material used to simulate one or more properties of high explosives. (5610.11)

Mode

Refers to the value occurring most frequently in a data set. (5400.XY)

Moderator

A material used to reduce the kinetic energy of neutrons by scattering collisions without appreciable neutron capture. (5480.3)

Monitoring terms

Modern aircraft

Aircraft whose performance capabilities, age, and ease of maintenance meet current state-of-the art and technology for the type aircraft involved. (5480.13)

Modification

Any change made to structures, systems, components, or procedures during any phase of the life of the reactor project. (5480.6)

Modified hazard ranking system

The methodology developed by DOE to rank sites containing hazardous substances and/or radionuclides. (5480.14)

Monitor

To measure certain constituents or parameters in an effluent stream continuously or at a frequency that permits a representative estimate of the amount over a specified interval of time. The instrumentation or device used in monitoring. (5400.XY)

Monitoring

- 1: Actions intended to detect and evaluate radiological conditions. (5480.11);
- 2: The making of observations and measurements to provide data to evaluate the performance of a waste management operation. (5820.2A)

Monitoring terms

- (a) **Effluent monitoring** Collection and analysis of samples or measurements of liquid and gaseous effluents for purposes of characterizing and quantifying contaminants, assessing radiation exposures of members of the public, and demonstrating compliance with applicable standards.
- (b) **Environmental surveillance** Collection and analysis of samples of air, water, soil, foodstuffs, biota, and other media from DOE sites and their environs and the measurement of external radiation for the purposes of demonstrating compliance with applicable standards, assessing radiation exposures of members of the public, and assessing effects, if any, on the local environment.

(5400.XX) (5400.5, Change 1)

Monumentation

Monumentation

The act of setting a permanent survey control point. (6430.1)

Most efficient organization

The product of a management study, which, based on the statement of work, identifies essential functions to be performed, determines performance factors, and describes a least costly alternative organization which represents a most effective organizational structure, staffing pattern, and operating procedures practicable to the function being studied. (4510.1A, Change 1)

Motor vehicle

Any government-owned or leased vehicle designated and operated principally for highway transportation of property or passengers. For seat belt usage, the term includes buses as it applies to drivers but not to passengers of buses, unless seat belts are provided. This term also includes all motor vehicles and material handling equipment in which seat belts are specifically required by 29 CFR 1926 and 1910. Such conveyances as motorcycles and motor scooters are not included in this definition. (3791.2A)

Multilevel systems

System/networks that incorporate the mode of operation that allows two or more classification levels (including unclassified) of information to be processed simultaneously within the same system when some users are not cleared for all levels of information present. (5637.1)

Multiple Integrated Laser Engagement System (MILES)

Engagement simulation system (ESS) has three elements: (a) devices that provide weapon effects; (b) a control system; and (c) a training support package. (5480.16, Change 2)

Multiplexing

The division of a transmission facility into two or more channels either by splitting the frequency band transmitted by the channel into narrower bands, each of which is used to constitute a distinct channel (frequency-division multiplexing), or by allotting this common channel to several different information channels, one at a time (time-division multiplexing). (5300.4B)

Multiprogram laboratory

A government-owned facility specifically designated in DOE 5000.1. (5700.7B, Change 2)

Munitions

Ammunition and explosives used by protective force personnel, Transportation Safeguards Division (AL) couriers, and Departmental safeguards and security staff personnel. An explosive is any chemical compound or mechanical mixture that, when subjected to such stimuli as heat, impact, friction, or shock undergoes a very rapid chemical change that releases large volumes of highly heated gases that exert pressure in the surrounding medium. The term applies to materials that either detonate or deflagrate. (5480.16, Change 2)

DOE ORDER DEFINITIONS

N

National Archives and Records Administration (NARA)

An independent Agency that succeeded National Archives Records Service (NARS). It is responsible for establishing policies and procedures for managing the records of the Federal Government. It exercises final authority for approving the disposition of government records. (1324.2A)

National defense

Programs for military and atomic energy production or construction, military assistance to any foreign nation, stockpiling, space, and directly related activity. (5560.1A)

National Defense Area (NDA)

An area established on non-Federal lands located within the United States, its possessions, or its territories for the purpose of safeguarding classified defense information or protecting Department of Defense (DOD) equipment and/or material. Establishment of a National Defense Area (NDA) temporarily places such non-Federal lands under the effective control of DOD and results only from an emergency event. The senior DOD representative at the scene will define the boundary, mark it with a physical barrier, and post warning signs. The landowner's consent and cooperation will be obtained whenever possible; however, military necessity will dictate the final decision regarding location, shape, and size of the NDA. (5530.1) (5500.1A, Change 1)

National Emergency Search Team

A group of experts assigned responsibility to provide assistance in nuclear threat emergencies including radiation detection systems and associated personnel for the search and identification of any ionizing radiation-producing materials that may have been lost or stolen or may be associated with bomb threats and/or radiation dispersal threats, without geographical limitations. (5500.1A, Change 1)

National Energy Software Center (NESC)

The centralized DOE scientific and technical computer software management facility operated by the Argonne National Laboratory. Specific activities of the facility include collection, review, compilation, sample problem testing, archival storage, announcement, and dissemination of DOE-sponsored scientific and technical computer software. (1360.4A)

National Institute for Occupational Safety and Health

National Institute for Occupational Safety and Health

An agency of the U.S. Department of Health and Human Services, established under Public Law 91-596 with major responsibility to undertake national occupational safety and health research and development activities. (5483.1A)

National laboratory

One of the Department's nine multiprogram laboratories. (5632.1A)

Nationally recognized testing laboratory

An organization that is recognized by OSHA in accordance with Appendix A of 29 CFR 1910.7 and that tests for safety, and lists or labels or accepts equipment or materials—e.g., FM and UL. (6430.1A)

National Response Team

The Federal agency team at the Headquarters level which serves as a standing committee to evaluate methods of responding to discharges or releases and to recommend needed changes in the response organization and revisions to the National Contingency Plan. The National Response Team is chaired by the Environmental Protection Agency representative except for periods of activation because of a response action when the chairman could be either the Environmental Protection Agency or U.S. Coast Guard representative. (5500.1A, Change 1)

National security

1: Those aspects of national security as outlined in the Atomic Energy Act that could be affected adversely by fire, explosion, or other catastrophes. (5480.7); 2: The national defense or foreign relations of the United States. (5635.1A)

National Security Area (NSA)

1: An area established on non-Federal lands located within the United States, its possessions, or territories, for the purpose of safeguarding classified and/or Restricted Data Information, or protecting DOE equipment and/or material. Establishment of a NSA temporary places such non-Federal lands under the effective control of the DOE and results only from an emergency event. The senior DOE representative having custody of the material at the scene will define the boundary, mark it with a physical barrier, and post warning signs. The landowner's consent and cooperation will be obtained whenever possible; however, operational necessity will dictate the final decision regarding location, shape, and size of the national security area NSA. (5530.1) (5500.4); 2: The equivalent within the DOD is a National Defense Area. (5500.1A, Change 1)

DOE Order Definitions

National security emergency preparedness critical functions

National security council information

Information contained in:

- (a) any document prepared by or intended primarily for use by the National Security Council, its interagency groups as defined in NSDD-2, or its associated committees and groups;
- (b) deliberations of the National Security Council, its interagency groups as defined in NSDD-2, or its associated committees and groups.

(5635.2B)

National security emergency preparedness critical functions

Six critical functions have been identified for DOE during a COG emergency. These functions are as follows:

- (a) coordinate and provide oversight for the provision of fuel resources (i.e. coal, natural gas, crude oil, and petroleum products and their respective production/distribution systems) in support of emergency assistance/restoration activities;
- (b) develop a national recovery plan for fuel production/distribution;
- (c) coordinate and provide oversight for the provision of electric power in support of emergency assistance/restoration activities;
- (d) coordinate and provide oversight for the continued safe operations of nuclear power production facilities in the support of emergency assistance/restoration activities;
- (e) develop a national recovery plan for electric power production/distribution;
- (f) provide for the emergency restoration of the manufacture, assembly, transport, and control of nuclear weapons or devices.

(5500.9)

National security information

National security information

1: Information pertaining to the national defense and foreign relations of the United States, and classified in accordance with an Executive Order. (1270.2A) (5670.2); 2: A category of information classified under Executive order and is defined in DOE 5650.2A. (5650.3, Change 1) (5631.2B); 3: Information which requires protection in the interest of national defense of foreign relations of the United States, and classified in accordance with an Executive Order, which does not fall within the definitions of restricted data or formerly restricted data. (5631.4); 4: Information that has been determined pursuant to Executive Order 12356, "National Security Information," or any predecessor order, to require protection against unauthorized disclosure and is so designated. (5632.1A) (5635.1A)

National security provision

A provision in the Transportation of Explosives Act of 1990 exempting the Department of Defense (DOD) from disclosure of classified information regarding the true contents of shipments of radioactive materials on commercial carriers when escorted by personnel of DOD or AEC (DOE). This provision is covered in the Hazardous Materials Regulations of the Department of Transportation by 49 CFR 1973.7(b). This provision provides no relief from the safety requirements of the Hazardous Materials Transportation Act (HMTA) and does not apply to Government-owned/operated transport conveyances (already exempt from HMTA). (5480.3A)

National warning system

A dedicated voice telephone circuit used by the National Warning Center for dissemination of warning information. (5500.1A, Change 1)

Natural barrier

The physical, chemical, and hydrological characteristics of the geological environment at the disposal site that, individually and collectively, act to retard or preclude waste migration. (5820.2A)

Naturally occurring and accelerator produced radioactive material

Any radioactive material that can be considered naturally occurring and is not source, special nuclear, or by-product material or that is produced in a charged particle accelerator. (5820.2A)

Near surface disposal

Natural resource damage assessment

An assessment (conducted under 43 CFR Part II), based on the results of a Natural Resource Damage Preassessment Screen of a release, that:

- (a) establishes whether a natural resource injury has occurred and resulted from the release;
- (b) quantifies the effects of the release in injury;
- (c) determines the financial compensation appropriate for the injury.

(5400.4)

Natural resource damage preassessment screen

Desk-top review of existing data (conducted under 43 CFR Part II) that is triggered when DOE is notified by an on-scene coordinator or lead agency of a potential injury due to a release to a natural resource for which DOE is a trustee. Such a review is to be completed as expeditiously as possible, with a minimal of field work, and provide a preliminary identification of the substance released and its source, initial estimated of the pathways for the purposes of identifying sources that may be impacted, and further identification of important resources that may justify further assessment. (5400.4)

Naval Nuclear Propulsion Information (NNPI)

That information, classified or unclassified, concerning the design, arrangement, development, manufacture, testing, operation, administration, training, maintenance, and repair of the propulsion plants of naval nuclear-powered ships and prototypes, including the associated nuclear support facilities. Information concerning equipment, components, or technology which are applicable to both Naval nuclear and conventional propulsion plants is not considered to be NNPI when used in reference to conventional applications only, provided no association with naval nuclear propulsion can be directly identified from the information in question. In cases where an association with naval nuclear propulsion can be directly identified from the information in question, designation of the information as NNPI is mandatory. More specific guidance on what constitutes NNPI will be provided on a case basis by the Deputy Assistant Secretary for Naval Reactors, or delegate, upon request by those Departmental Elements requiring it to properly and effectively implement the provisions of this Order. (5630.8A) (5631.4)

Near surface disposal

Disposal in the upper 30 meters of the earth's surface—e.g., shallow land burial. (5820.2A)

Need-to-know

Need-to-know

1: A determination by persons having responsibility for classified information or matter that a proposed recipient's access to such classified information or matter is necessary in the performance of their official or contractual duties of employment. (5632.1A) (5635.1A); 2: An official determination, by a division director or higher official, that an employee, contractor, or properly cleared individual requires access to the specific classified information in the performance of official duties. (5631.4); 3: The determination by persons having responsibility for classified information or matter, that is proposed recipient's access to such classified information or matter is necessary in the performance of official or contractual duties of employment under the cognizance of the Department of Energy. (5631.2B)

Net explosive weight

The weight of the energy-producing material in munitions. (5480.16, Change 2)

Network

A communications medium and all components attached to that medium that are responsible for the transfer of information. Such components may include ADP systems, packet switches, telecommunications controllers, key distribution centers, technical control devices, and other networks. (5637.1)

Neutralize

To counteract the effectiveness of an adversary force. (5632.1A)

News media activities

Those activities or events intended primarily for the news media, including news conferences, seminars, roundtable conferences, news briefings, tours, demonstrations, interviews, dedications, and groundbreakings. (1200.1)

News media materials

All materials intended primarily for news media, including public announcements, press releases, fact sheets, news features, notes to editors, press advisories, questions and answers, responses to query, backgrounds, still photos, film, and tapes. (1200.1)

New storage facility

A newly constructed facility or the conversion of existing facility, or portion of an existing facility, for use as an unirradiated enriched uranium storage facility. (6430.1A)

Non-DOE funded work

Night simulation glasses

Goggles for day use that simulate night conditions. (5480.16, Change 2)

Night vision goggles

The principal component of a night vision imaging system. (5480.16, Change 2)

No-lone zone

An area in which the two-person concept for operations shall apply. (5610.3)

Nominal rent

Consideration in money or services of a token amount, usually \$1.00 per annum. It denotes a consideration unrelated to the fair rental value of the leased property. (4300.1B)

Non-compliance

The failure of a recipient or sub recipient to comply with 10 CFR Part 1040. (1600.6)

Non-concurrences

Directed to the entire concept of the response and not to how the response is written. Nonconcurrences may not be for editorial reasons. (1325.1A)

Non-critical fuels and forms of energy

Coal; coal derivatives; wood and waste wood products; refuse derived fuel and alternative waste liquid fuels, such as alcohol, waste oil, and waste oil mixtures, which have been determined to be alternate fuels under the Powerplant and Industrial Fuel Use Act; coal slurries, which do not involve oil transport mediums or from which the oil transport medium has been removed; and noncombustible energy forms such as nuclear, solar, wind, hydro, and geothermal energy. (4330.2C)

Non-DOE entities

Include other federal agencies, state, regional, and local governments; educational institutions; private individuals, commercial firms, non-profit or not-for-profit organizations; international bodies; and foreign governments, individuals, firms, or organizations. (1300.3) (4300.2A)

Non-DOE funded work

Any work performed for non-DOE entities that utilize DOE facilities or contractor personnel and are not directly funded wholly or in part by DOE. (4300.2A) (1300.3)

Nonexpenditure transfers

Nonexpenditure transfers

Nonexpenditure transfers between appropriations and between fund accounts refer to the establishment or modification of appropriations on the basis of appropriation warrants, including increases or decreases in such appropriations pursuant to authorized nonexpenditure transfers between the appropriations and between fund accounts; borrowing from the Department of the Treasury and repayments of such borrowing; and credits to miscellaneous receipts representing repayment of the Government's investment in a revolving fund or distribution of earnings of a revolving fund.

(a) Types of nonexpenditure transfers

- (1) Nonexpenditure transfers** Limited to transactions in which both the withdrawal and the credit occur within one of the following groups of accounts:
 - (a)** accounts within the budget (general, revolving, management, and special accounts);
 - (b)** trust fund accounts; or
 - (c)** accounts outside the budget (deposit fund accounts).
- (2) Withdrawals and credits** The following general types of nonexpenditure transfers constitute all the transactions in this category and shall not be recorded or reported as obligations, expenditures, or reimbursements.
 - (a) Transfers without benefit to the transferring account** Include reorganization transfers, redistributions of appropriations or balances, and redelgations of authority, which permit funds to be expended under other appropriations or fund symbols.
 - (b) Borrowings from the Department of the Treasury under loan authorizations** Include amounts advanced by the Department of the Treasury and amounts returned on principal. Interest payments represent expenditure transactions and are excluded.

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Nonexpenditure transfers

(2) Withdrawals and credits (continued)

- (c) **Capital transfers** Represent the transactions of a revolving fund whereby capital investment of DOE or earnings are transferred for credit to designated capital transfer miscellaneous receipt accounts.
- (d) **Transfers to successor M accounts** The accounts of each appropriation available for obligation for a definite period of time will be closed at the end of the second full fiscal year after the fiscal year or years for which the appropriation was available for obligation. DAAD is responsible for transferring the unpaid balance of a lapsing-fiscal-year account to an M account. The Department of the Treasury will accomplish the nonexpenditure transfer of the unpaid balances in the control accounts based upon column 3 of TFS Form 2108, "Year-End Closing Statement," submitted in accordance with I TFM 2-4200. DOE's accounts and fiscal-year end reports must also reflect the transfer of unpaid balances to M accounts as of the fiscal year end.
- (e) **Borrowing from other funds** Include amounts advanced by the Federal Financing Bank to agencies authorized to issue, sell, or guarantee their obligations in lieu of borrowing from the Department of the Treasury or issuing securities to the public. However, any Federal Financing Bank action that reduces an appropriation balance with the Department of the Treasury rather than provides a direct advance will require obligation and disbursement transactions to balance with the Department of the Treasury's account.

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Nonexpenditure transfers

Nonexpenditure transfers (continued)

- (b) **Processing nonexpenditure transfers out** DOE 5160.1A, Reprogramming, Restructuring, and Appropriation Transfer Procedures, of 12-1-86, describes procedures for processing the approval of an appropriation transfer request.
- (1) Following approval of the request, SF-1151, "Nonexpenditure Transfer Authorization," will be used for processing non-expenditure transactions. The original request for transfer shall be transmitted to DAAD for preparation of the SF-1151. Generally, only one nonexpenditure transaction request should be documented on SF-1151. However, an SF-1151 may be used to document more than one transfer, provided that all of them are based on the same legal authority. The form must contain a citation of the legal authority for the transfer, including reference wherever possible to the United States Code.
- (2) Following receipt of the request, DAAD shall prepare the SF-1151 and transmit the original SF-1151 and four copies to:
- Manager
 - Finance and Funding Branch
 - Financial Management Services
 - Department of the Treasury
 - Washington, DC 20226

DAAD shall retain one copy of the SF-1151 pending the return of an accomplished copy.

(2205, Change 1)

Non-federal entity

An entity that is not part of the U.S. Government or a U.S. federally chartered corporation. (2200.4)

Non-record material

Non-form item

A printed product without spaces for entering information. Such items (instruction sheets and bulletins, pamphlets, notices, contract, clause sheets, placards, certain tags and labels, and so forth) shall be assigned form numbers and controlled through the forms management program for referencing, printing, stocking, and distributing. (1322.8) (1322.2B)

Non-fund cost

1: A cost which generally does not affect appropriations, allotments or suballotments, obligations, or payments; e.g., depreciation and nuclear material consumed or lost. (2100.8); 2: A cost that generally does not affect appropriations, allotments, or suballotments, obligations, or payments, e.g., depreciation and nuclear materials consumed or lost. However, with respect to plant and capital equipments transactions, nonfund costs may affect the amount required in an approved funding program or allotment. (2200.4)

Non-government

See Non-federal entity. (2200.4)

Non-major item of ADPE

Any item of ADPE costing less than the specified dollar-level threshold criteria for a major item of ADPE. (1360.1A)

Non-record material

1: Those classes of documentary or other material which may be disposed of without archival authority. See DOE 1324.2, page 1-3. (1324.5);
2: Documentary materials that do not meet both conditions of record status or that are specifically excluded by statute from status as records. (1324);
3: Nonrecord material includes those classes of documentary or other material that may be disposed of without archival authority such as the following:

- (a) library or museum material made or acquired for reference or exhibition purposes;
- (b) extra copies of documents preserved only for convenience of reference on which no action is recorded or taken;
- (c) stocks of publications or other processed documents that require no action and are not part of a case on which action is taken;

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Non-record material

Non-record material (continued)

- (d) routing slips and transmittal sheets adding no information to that contained in the transmitted material, i.e., concurrences, direction on how to proceed or implement;
- (e) papers of a private or nonofficial character that pertain to an individual's private affairs. See Disposition of Federal records, Records Management Handbook, FSN 7610-01-055-8704.

(1324.2A)

Non-routine information and activities

In general, are those which are likely to result in regional or national news media attention, public controversy, or public reaction by elected officials or for which there is no standing policy or precedent. It is recognized that determining what is non-routine and what is routine is often a matter of judgment. When there is a question about whether a matter is non-routine, the determination shall be made by the operations office or, in the case of Headquarters, by the program office in consultation with the Press Secretary. (1200.1)

Non-stochastic effects

Effects such as the opacity of the lens of the eye for which the severity of the effect varies with the dose, and for which a threshold may exist. (5480.11)

Normal cost

The annual cost associated with the current year by the actuarial cost method used for the actuarial valuation. (3830.1)

Normal environment

The expected and logistical and operational environments as defined in a weapon's stockpile-to-target-sequence and military characteristics that the weapon is required to survive without degradation in operational reliability. In DOE manufacturing, testing, and transportation operations, normal environment means the environment to which a nuclear explosive is expected to be exposed. (5610.10)

Notices

1: Documents published in the "Federal Register" that are not Presidential documents or do not relate to rulemaking proceedings. Notice documents concern matters applicable to the public and are published for public information. (1900.2B); 2: Documents published in the "Federal Register" that do not relate to a rulemaking proceeding. Notice documents concern matters applicable to the public. They provide public notice of any Departmental action, or inform the public of any information issued by the Department. These include, but are not limited to, the following types of actions:

- (a) meetings;
- (b) applications;
- (c) issuance or revocations of licenses;
- (d) grant application deadlines;
- (e) availability of certain environmental impact statements;
- (f) certain petitions and exemptions;
- (g) decisions and orders;
- (h) program information.

(1900.1D) (1900.2B)

Nuclear components

Those nuclear explosive or device parts of subassemblies which contain fissile and/or radioactive and other materials. (5610.10)

Nuclear criticality

A self-sustaining chain reaction, i.e., the state in which the effective neutron multiplication constant of a system of fissionable material equals or exceeds unity. (5480.5)

Nuclear criticality safety

The prevention or termination of inadvertent nuclear criticality, mitigation of consequences, and protection against injury or damage due to an accidental nuclear criticality. (5480.5)

Nuclear detonation

An energy release through a nuclear process, during a period of time on the order of one microsecond, in an amount equivalent to the energy release by the detonation of four or more pounds of TNT. (5610.3) (5610.11)

Nuclear Emergency Search Team (NEST)

Nuclear Emergency Search Team (NEST)

1: A team of scientists, engineers, and technicians that is trained and organized to respond rapidly with technical assistance in locating nuclear weapons or materials. (5500.4); 2: A group of DOE and DOE-contractor/laboratory scientists, engineers, and technicians who develop and maintain special equipment and procedures for deploying search, identification, diagnostic, disablement, damage mitigation, and other specialized support capabilities in response to lost or stolen nuclear weapons and special nuclear materials, to nuclear explosive threats, and to radiation dispersal threats. (5530.1)

Nuclear explosive

1: Any assembly or subassembly containing fissile and/or radioactive materials and high explosives, propellants, or other means capable of producing a nuclear detonation. (5610.1); 2: Any assembly or subassembly containing fusionable or fissionable materials and high explosive or propellants capable of producing a nuclear detonation. NOTE: Included in the definition are nuclear weapons or devices utilizing nuclear energy, the principal purpose of which is for use as or for the development of an explosive device, an explosive device prototype, or an explosive test device. (5610.3); 3: Any assembly containing fissionable and/or fusionable materials and main charge high explosive parts or propellants capable of producing a nuclear detonation—e.g., a nuclear weapon or test device. (5610.11) (5610.10)

Nuclear explosive and weapon safety program

The DOE program devoted to the safety of nuclear explosives and weapons as set forth in this Order and in DOE 5610.11 and 5610.13. (5610.10)

Nuclear explosive area

Any area that contains a nuclear explosive or the unassembled main charge high explosive parts and pit. (5610.11)

Nuclear explosive duty

Duty that requires DOE or DOE contractor employee to perform hands-on work on a nuclear explosive and/or to have access to and/or control of a nuclear explosive that could allow an individual to cause a detonation. (5610.11)

Nuclear explosive safety standards

Nuclear Explosive-Like Assembly (NELA)

A nonnuclear assembly that represents a nuclear explosive in its basic configuration (main charge high explosive and pit) and any subsequent level of assembly up to its final configuration, or which represents a weaponized nuclear explosive such as a warhead, bomb, reentry vehicle, or artillery shell. This nonnuclear assembly does not contain an arrangement of high explosive and fissile material capable of producing a nuclear detonation. (5610.11)

Nuclear explosive occurrence

Any inadvertent or unauthorized occurrence involving a nuclear explosive which constitutes an actual or potential degradation of nuclear explosive safety. (5610.3)

Nuclear explosive safety

Protection against accidental or unauthorized action involving nuclear explosives which may result in detonation (high explosive or nuclear). All references to safety in this Order pertain to nuclear explosive safety. (5610.3)

Nuclear explosive safety rules

Safety rules are approved administrative and operational procedural requirements developed to govern operations with nuclear explosives. There are two classes of nuclear explosive safety rules.

- (a) **General safety rules** Approved administrative and operational procedures which have a continuing application for operations with nuclear explosives. Included are basic safety directives.
- (b) **Specific safety rules** Approved administrative and operational procedures which have been developed to supplement general safety rules and to address specific characteristics of an individual design of a nuclear explosive, specific test, or operation.

(5610.3)

Nuclear explosive safety standards

Five qualitative requirements for positive measures to prevent an accidental, inadvertent, or deliberate unauthorized nuclear detonation or actions that might lead to a detonation, to provide for physical security, and to prevent plutonium dispersal. These standards may be met through design features, safety rules, and procedures that reduce risk. (5610.10)

Nuclear explosive safety study

Nuclear explosive safety study

A formal DOE process whereby the safety of an operation, including transportation, involving a nuclear explosive is evaluated and documented in a study report. (5610.10) (5610.11)

Nuclear explosive safety survey

A formal DOE process whereby a DOE operation, including transportation, involving a nuclear explosive is evaluated by conducting a comparative analysis of the operation with the nuclear explosive operation evaluated in an existing Nuclear Explosive Safety Study report. (5610.10) (5610.11)

Nuclear facility

A facility whose operations involve radioactive materials in such form and quantity that a significant nuclear hazard potentially exists to the employees or the general public. Included are facilities that:

- (a) produce, process, or store radioactive liquid or solid waste, fissionable materials, or tritium;
- (b) conduct separations operations;
- (c) conduct irradiated materials inspection, fuel fabrication, decontamination, or recovery operations;
- (d) conduct fuel enrichment operations. Incidental use of radioactive materials in a facility operation (e.g., check sources, radioactive sources, and X-ray machines) does not necessarily require the facility to be included in this definition. Accelerators and reactors and their operations are not included.

(5480.5) (6430.1A)

Nuclear Material (NM)

1: All materials so designated by the Secretary. Presently, these materials are: depleted uranium, enriched uranium, americium-241, americium-243 (Curium, berkelium, californium, plutonium 238-242, lithium 6, uranium-233), normal uranium, neptunium-237, deuterium, tritium, thorium. (5633.3) (5634.1A); 2: Includes special nuclear material, byproduct material, and source material as defined in the Atomic Energy Act, and any other material or components of nuclear weapons that are determined to be nuclear material under the procedures on page 8, paragraph 7e. (5650.3, Change 1);

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Nuclear materials accounting

Nuclear Material (NM) (continued)

3: A collective term that includes all materials designated from time-to-time by the Secretary. When applying nuclear materials management concepts, the affected materials are enriched uranium, normal uranium, plutonium, tritium, uranium-233, plutonium-238, and heavy water. (5660.1)

Nuclear material production reactor operator

An individual certified by DOE contractor management to operate (manipulate the controls of) a DOE-owned nuclear material production reactor. (5631.6)

Nuclear materials accountability

That part of the safeguards program encompassing the procedures and systems to:

- (a) perform nuclear material measurements;
- (b) verify the location and quantities of nuclear material through physical inventories;
- (c) maintain records and provide reports;
- (d) perform data analysis to account for nuclear material and to detect losses;
- (e) help investigate and resolve apparent losses of nuclear material.

(5633.3, Change 1)

Nuclear materials accounting

1: The principles and/or practices of systematically recording, reporting, and interpreting nuclear material transaction and physical inventory data. (5633.3); 2: The part of the safeguards program applied to nuclear materials and their associated records to: (a) maintain knowledge of the quantities of nuclear materials; (b) promptly verify the existence of nuclear material; (c) promptly detect malevolent acts involving nuclear material; and (d) help investigate and resolve apparent losses of nuclear materials. (5634.1A)

Nuclear materials control

Nuclear materials control

1: The part of the safeguards program applied to nuclear material and personnel and equipment handling nuclear material to: (a) govern and maintain vigilance over nuclear material activities; (b) promptly verify the existence of nuclear material; (c) promptly detect malevolent acts involving nuclear material; (d) help investigate and resolve apparent losses of nuclear material. Nuclear materials control interfaces with the nuclear materials accounting and physical protection parts of the safeguards program. (5634.1A); 2: That part of the safeguards program encompassing management and process controls to: (a) assign and exercise responsibility for nuclear material; (b) maintain vigilance over the material; (c) govern its movement, location, and use; (d) monitor the inventory and process status, detect unauthorized activities for all nuclear material; and (e) help investigate and resolve apparent losses of nuclear material. (5633.3, Change 1)

Nuclear materials management and safeguards system

The national data base and information support system for nuclear materials controlled by the U.S. Government, created to support national safeguards and management objectives in the domestic and foreign utilization of nuclear resources. The system stores data on nuclear material transactions and inventories, and produces a wide range of printed reports for use by DOE and Nuclear Regulatory Commission (NRC). The system is used to satisfy the nuclear materials information requirements of agreements between the U.S. and foreign entities. In addition, the system provides the reporting interface between facilities selected under the provisions of the U.S./IAEA Agreement, and the International Atomic Energy Agency. The system uses a centralized computer data base linked via direct data communication lines and the secure automated communications network (SACNET) to a number of facilities, DOE offices, and NRC offices in the U.S. (1270.2A) (5660.1) (5633.5)

Nuclear materials management and standards

A reporting and analytical system used in safeguarding and managing nuclear materials. (5500.1A, Change 1)

Nuclear materials representative

The person responsible for nuclear materials reporting and data submission to the Nuclear Materials Management and Safeguards System. (5633.3)

Nuclear materials survey(s)

A comprehensive examination and evaluation of the effectiveness of the control and accountability systems for/of nuclear materials at DOE facilities to meet a spectrum of threats. (5633.3, Change 1) (5634.1A)

Nuclear weapon significant incident

Nuclear weapon

A nuclear explosive configured for operational use by DOD. (5610.10)

Nuclear weapon accident

An unexpected event involving nuclear weapons or radiological nuclear weapon components that results in any of the following:

- (a) accidental or unauthorized launching, firing, or use by U.S. forces or U.S.-supported allied forces of a nuclear-capable weapon(s) system that could create the risk of an outbreak of war;
- (b) nuclear detonation;
- (c) nonnuclear detonation or burning of a nuclear weapon or radiological nuclear weapon component;
- (d) radioactive contamination;
- (e) seizure, theft, loss, or destruction of a nuclear weapon or radiological nuclear weapon component, including jettisoning;
- (f) public hazard, actual or implied.

(5530.1) (5500.4)

Nuclear weapons

DOE nuclear weapons, assemblies, components, or parts thereof, including software, and associated test and handling equipment. (QC-2)

Nuclear weapon significant incident

An unexpected event involving nuclear weapons or actual radiological components of nuclear weapons that does not fall in the nuclear weapon accident category but:

- (a) results in evident damage to a nuclear weapon or actual radiological component of a nuclear weapon to the extent that major rework, complete replacement, or examination or recertification by the Department of Energy (DOE) is required;
- (b) requires immediate action in the interest of safety or nuclear weapons security;
- (c) may result in adverse public reaction (national or international) or premature release of classified information;

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Nuclear weapon significant incident

Nuclear weapon significant incident (continued)

- (d) could lead to a nuclear weapon accident and warrants that high officials of DOE, the Department of Defense, and Federal Emergency Management Agency be informed or take action.

(5500.1A) (5530.1) (5500.4)

Nuclear yield

The energy released in the detonation of a nuclear weapon, measured in terms of the kilotons or megatons of trinitrotoluene (TNT) required to produce the same energy release. (5610.10)

DOE ORDER DEFINITIONS



Object classification

A uniform classification identifying the transactions of the Federal Government by the nature of the goods or services purchases such as personnel compensation, supplies and materials, or equipment, without regard to the agency involved or the purpose of the programs for which they are used. (2200.4)

Objective personality tests

Tests that are usually represented by a series of written questions to which the subject replies Yes, No, or (I am) Uncertain. A numerical score results, which is usually weighted and yields a personality profile. (5480.YY)

Obligational authority

The sum of budget authority provided for a given fiscal year; amounts authorized to be credited to a specific fund or account during that year, including transfer between funds, or accounts; and balances of amounts brought forward from previous years that remain available for obligation. (2200.4)

Obligations

Amounts of orders placed, contracts awarded, services received, and similar transactions during a given period that will require payments during the same or a future period. Such amounts include outlays for which obligations have not been previously recorded and reflect adjustments for differences between obligations previously recorded and actual outlays to liquidate those obligations. All obligations must be supported by written documentation or law. (2200.4)

Obsolescent ADPE

ADPE that is no longer meeting program requirements in a cost-effective manner primarily because of aging technology. Generally, ADPE that is over 8 years old, based on the delivery date of its first unit, should be examined to determine whether it is approaching obsolescence. (1360.1A)

Occupational medicine

Occupational medicine

A specialty branch of the profession of medicine that deals with the health protection and health maintenance of employees, with special reference to job hazards, job stresses, and work environment hazards. (5480.8)

Occupational Safety and Health Administration (OSHA)

An agency of the U.S. Department of Labor, established under Public Law 91-596 with major responsibilities to promulgate, prescribe, and enforce occupational safety and health standards. (5483.1A) (5480.4, Change 1)

Occupational worker

An individual who is either a DOE or DOE contractor employee; an employee of a subcontractor to a DOE contractor; or an individual who visits to perform work for or in conjunction with DOE or utilizes DOE facilities. (5480.11)

Occupation medical program

A program to:

- (a) assure the health and safety of employees in their work environments through application of occupational medical principles;
- (b) determine the physical and mental fitness of employees to perform job assignments without undue hazard to themselves, fellow employees, or the public at large;
- (c) assure the early detection and treatment of employee illness or injuries by means of scheduled periodic health evaluations and unscheduled employee health visits;
- (d) contribute to the maintenance of good employee health through the application of preventive medical measures, such as immunizations, alcohol and drug abuse programs, and health counseling.

(5480.8)

Occupiable area

See definition in 41 CFR 101-17.003. (6430.1A)

Occupied area (explosives)

Any work area to which personnel are assigned or any non-work area where persons regularly congregate. In the context of Class II bays for explosives facilities, access ramps and plant roads are not considered occupied areas. (6430.1A)

Occurrence

1: Any deviation from the planned or expected behavior or course of events in connection with any DOE or DOE-controlled operation if the deviation has environmental protection, safety, or health protection significance. (3792.3) (5484.1, Change 7); 2: Any sudden release or sustained deviation from a regulated or planned performance at a DOE operation that has environmental protection and compliance significance. (5400.XY); 3: This term by itself is not used in this RFAO Order. See Type A, Type B, and Type C Occurrence. (RF 5000.3, Rev. 1)

Occurrence report

A written evaluation of an event or condition that is prepared in sufficient detail to enable the reader to assess its significance, consequences, or implications and to evaluate the actions being proposed or employed to correct the condition or to avoid recurrence. (5000.3A)

Offeror

Any person, firm, unincorporated association, joint venture, partnership, corporation, or affiliate thereof, that submits a bid or proposal, solicited or unsolicited to the Department to obtain a contract or modification. (4220.4)

Office of Primary Interest (OPI)

Denotes the organization originating a directive. (1321.1B, Change 1)

Office of Scientific and Technical Information (MA-28)

The Department's centralized scientific and technical information management office. The Office of Scientific and Technical Information is located at the Technical Information Center in Oak Ridge, Tennessee. (1430.1A)

Official business

All activities done using DOE-owned equipment off-site or privately-owned equipment on- or off-site when preauthorization is given in writing by responsible DOE official(s). (1360.7)

Official distribution

Official distribution

The total distribution of a specific scientific and technical information document to recipients approved by the responsible program manager as being within the programmatic interest of the originator to receive the document. Official distribution includes, but is not limited to, standard distribution as defined above and distribution to supplemental mailing lists. It encompasses the total quantity printed in relation to the distribution plan. (1430.1A)

Official draft audit report

Preliminary report issued by the IG to an audited program/operation and affected elements for review and comment prior to finalizing IG findings and recommendations. The official draft audit report will generally include a synopsis of comments submitted by the audited program/operation in response to the tentative findings. (2320.2A)

Official foreign travel

Approved travel (whether wholly or partly on official business) to or from the United States (between United States official stations and foreign destinations and return), within a foreign country, or between foreign countries, by persons, including foreign nationals, whose salaries or travel expenses or both will ultimately be reimbursed in whole or in part by DOE from its appropriations, subject to the exceptions below. Official foreign travel includes travel where expenses are reimbursed by non-DOE sources. Official foreign travel includes vacation travel when as part of the travel the traveler is representing DOE. However, it does not include travel:

- (a) to, from, and within the Marshall Islands in connection with DOE program activities;
- (b) to, from, and within Canada or Mexico conducted by the Power Marketing Administrations in connection with business-related activities, including training;
- (c) related to the permanent assignment of personnel overseas. This includes: permanent change of station travel; home leave; dependents' education travel; emergency travel—i.e., medical, rest, and recuperative travel; and travel within the continent in which the assignment is located;

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Official foreign travel (continued)

- (d) within or between foreign countries by citizens of other countries employed outside the United States by DOE contractors;
- (e) between a United States permanent official station or post of duty and a United States stopover in route to or from a foreign destination where temporary duty related to the foreign trip is performed at the stopover; and
- (f) conducted under a DOE approved grant or cooperative agreement.

(1500.3)

Official identification

Departmental Identification DOE F 5631.19, "DOE Employee Badges," a DOE courier credential, a Federal officer credential, or similar official DOE identification. Other identification: an identification badge issued to an employee by his or her organization which contains a photo, physical descriptive information, and his or her signature. (5635.3)

Official records

As defined in 44 U.S.C. Section 3301, include all books, papers, maps, photographs, machine-readable material, or other documentary materials, regardless of physical form or characteristics, made or received by DOE under Federal law or in connection with the transaction of public business and preserved as evidence of the Department's organizations, functions, policies, decisions, procedures, operations, or other activities, or because of the informational value of the data they contain. (1324.7) (1324.2A)

Official seal

Means the original(s) of the seal showing the exact form, content and colors thereof. (1000.2)

Official Use Only (OUO)

A designation identifying unclassified information that may be exempt from mandatory disclosure under the FOIA. (5635.1A)

Off-line bank

Off-line bank

A bank that does not have the capability to transfer funds electronically through the FEDWIRE Funds Transfer Network, but rather must rely on a correspondent bank that has the capability. (2200.4)

Off-line monitoring systems

Systems in which an aliquot is withdrawn from the effluent stream for collection or conveyance to a detector or assembly. (5400.XY)

Offsetting controls

The mechanisms relied upon to efficiently and effectively minimize risk and thus help safeguard an activity from waste, loss, mismanagement, unauthorized use, or misappropriation. Offsetting controls include, but are not limited to, such things as specific policies, procedures, plans of organization (including separation of duties), and physical arrangements (such as locks and fire alarms). Major offsetting controls are identified in the vulnerability assessment process. Detailed offsetting controls are identified in the abbreviated internal control review and the internal control review processes. (1000.3B)

Offsetting receipts (collections)

All collections deposited into receipt accounts that are offset against budget authority and outlays rather than reflected as budget receipts in computing budget totals. Under current budgetary usage, cash collections not deposited into receipt accounts (such as revolving fund receipts and reimbursements) are deducted from outlays at the account level. The transactions are offsetting collections but are not classified as offsetting receipts. Offsetting receipts generally are deducted at the budget function or subfunction level and from agency budget authority and outlays. In three cases—employer share of employee retirement, intragovernmental interest received by a trust fund, and rents and royalties from the Outer Continental Shelf lands—the deductions, referred to as undisturbed offsetting receipts, are made from budget totals rather than offset by function and subfunction and by agency. Offsetting receipts are subdivided into two major categories.

- (a) **Proprietary receipts from the public** Collections from the public deposited in receipt accounts that arise from the conduct of business-type activities. Examples are sales of timber, power, stream, and isotopes.

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Offsetting receipts (collections) (continued)

- (b) **Intragovernmental transaction** All collections or deposits into receipt accounts in which the payment is made by a Federal agency. Intragovernmental transactions may represent either receipts from off-budget Federal entities, where a payment comes from a Federal entity whose funds are excluded from the budget totals, or intrabudgetary transactions, where both the paying and the receiving accounts are within the budget. Intrabudgetary transactions, in turn, are further subdivided into three groups.
- (1) **Interfund transactions** Transactions where the payment is from a Federal to a trust fund, or vice versa.
- (2) **Federal intrafund transactions** Transaction where both the paying and the receiving accounts are Federal funds.
- (3) **Trust intrafund transactions** Transactions where both the paying and the receiving accounts are trust funds.

(2200.4)

Offsite

1: This refers to non-Government-owned, -rented, or -leased facilities and includes homes of individuals or quarters while on travel. (1360.7); 2: The geographical area beyond the facility/site area over which the Cognizant Federal Agency does not have access control authority. For a nuclear weapons accident, that area beyond the boundaries of a Department of Defense installation or DOE facility, including the area beyond the boundary of the National Defense Area or National Security Area where in hazards to health or public safety may result from the accident. (5500.1A, Change 1); 3: A particular geographical area beyond the facility/site area over which DOE does not have routine access control. (5500.3, Change 1); 4: That area beyond the boundaries of a DOD installation or DOE facility, including the area beyond the boundary of a national defense area (NDA) or a national security area (NSA), wherein hazards to health or public safety may result from the accident. (5530.1); 5: Any area that is not onsite. (5480.3A)

Offsite technical director

The DOE or Environmental Protection Agency official designated to coordinate offsite Federal radiological monitoring and assessment activities.
(5500.1A, Change 1)

OMB target level

OMB target level

This funding level is typically distributed by OMB to the decision unit level of detail. However, organizations may shift funds from one decision unit to another provided that they do not exceed the overall OMB allowance for the organization and do not reopen major issue items already the subject of secretarial decisions. (5100.4)

One-point detonation

A detonation of High Explosive (HE) which is initiated at a single point. This type of detonation may be intentionally initiated in certain self-destruct systems. (5610.10)

One-point safe nuclear explosives

Those nuclear explosives which in the event of a detonation initiated at any one point in the high explosive system presents no greater probability than 1 in 106/one in one million of achieving a nuclear detonation. (5610.1) (5610.3) (5610.11)

Online bank

A bank that has the capability to transfer funds electronically through the FEDWIRE Funds Transfer Network. (2200.4)

Onscene

1: The area surrounding an accident or incident site that is, or potentially could be, impacted by a nuclear weapon accident or nuclear weapon significant incident. This area includes both the "onsite" and "offsite" areas. (5530.1); 2: The area surrounding an accident or incident site that is, or potentially could be, affected by the accident or incident. This area includes both the onsite and offsite areas. (5500.1A, Change 1)

Onscene Commander (OSC)

1: An officer or senior official who commands DOD and/or DOE operations at the scene of a DOD/DOE nuclear weapon accident or significant incident. The Onscene Commander (OSC) serves as the Cognizant Federal Agency Official (CFAO) under the Federal Radiological Emergency Response Plan (FRERP). (5530.1); 2: An officer or senior official who commands Department of Defense and/or DOE operations at the scene of a Department of Defense or DOE nuclear weapon accident or significant incident. For a security event, the officer or senior official who commands operations at the scene of the event. (5500.1A, Change 1)

Operating and onsite contractor

Onsite

1: The facility/site area over which the Cognizant Federal Agency has access control authority or, for a nuclear weapons accident or significant incident, that area around the scene (of a nuclear weapon accident or significant incident) which is under the operational control of the installation commander, facility manager, or DOD/DOE Onscene Commander. The onsite area includes any area that has been established as a National Defense Area (NDA) or National Security Area (NSA). (5530.1) (5500.1A, Change 1); 2: This refers to Government-owned, -rented, or -leased facilities. (1360.7); 3: Refers to the area within the boundaries of a facility or site that is or can be controlled with respect to access by the general public. (5400.XY); 4: Any area that is fenced or otherwise access controlled DOE property. Rights-of-way on DOE property to which the public has access are considered offsite for regulatory purposes. (5480.3A)

Onsite operating contractor

Generally speaking, an organization under contract to DOE for the purpose of operating and maintaining a DOE site. See DOE Procurement Regulation 9-50.00 (a)(1). (4330.4)

Onsite packaging

Any package authorized specifically for onsite transfers and which is not authorized for offsite shipments. (5480.3A)

Onsite Technical Director

Official, selected by the DOE Team Leader or Onscene Commander, who is responsible for directing the onsite operations for the DOE Team Leader or Onscene Commander for a nuclear weapons accident response. (5500.1A, Change 1)

Operable

When the reactor is being operated or has the potential for being operated. A reactor that cannot be operated on a day-to-day basis because of refueling, extensive modifications, or technical problems is still considered to be operable. (5480.6)

Operating and onsite contractor

Contractors who manage or operate Department-owned or -controlled laboratories, production plants, and research facilities; or, onsite service contractors who perform services of a continuing nature at Department-owned or -controlled sites, as defined in DOE Procurement Regulations 9-50-001. (3220.2)

Operating area compartment

Operating area compartment

An area or series of areas that contain process enclosures, and/or their attendant equipment located within that area or series of areas. (6430.1A)

Operating Basis Accident (OBA)

Maximum severity accident under which the plant structure, systems, and components are designed to either remain operable or be readily restored to operating condition. This is the highest severity event that the operating contractor may recover from without DOE approval. (6430.1A)

Operating costs

Costs allocated or expended for the operation of a project or facility. (5660.1)

Operating level

The organization performing the actual work or job related tasks. It may be a contractor performing work for DOE or it may be a particular DOE element, such as an energy technology center or a power administration. (5482.1B)

Operational approval

A determination by the head of a field organization or the head of a headquarter's organization that a proposed visit to a facility under his/her jurisdiction is feasible, is subject to limitations that may be prescribed, and that the visitor has a "need-to-know." (5631.4)

Operational audit

Pertains to the operation and management of Departmental programs and administrative functions. (2300.1A)

Operational DBA

Any design basis accident caused by an internal event. Direct causes are usually poor design or procedure, operator errors, equipment failures, or inadequate technical development (unknowns) that lead to the accident. The major accident categories are explosion, fire, nuclear criticality, leaks to the atmosphere, and leaks to the aquatic environment. (6430.1A)

Operational emergency management team

A DOE team predestinated to manage activities during operational emergencies involving DOE or requiring DOE assistance. (5500.1A, Change 1)

Optimum interspersed hydrogenous moderation

Operational readiness review

A structured method for determining that a project, process, or facility is ready to operate and occupy and includes, as a minimum, review of the readiness of the plant and hardware, personnel, and procedures. The review includes a determination of compliance with ES&H Orders. (5480.5) (5480.6)

Operational safety requirements

Those requirements which define the conditions, safe boundaries, and bases thereof, and management or administrative controls required to assure the safe operation of a nuclear facility. (5480.5) (6430.1A)

Operations

- 1: Activities funded by DOE for which DOE has responsibility for environmental protection, safety, and health protection. (5480.4, Change 1);
- 2: Activities concerned with the assembly, disassembly, handling, maintenance, repair, modification, quality evaluation, storage, transportation, testing, planned nuclear or nonnuclear detonations (up to detonation), and retirement of nuclear explosives. (5610.3)

Operations security

An unclassified term referring to a co-mingling of computer, technical counterintelligence security measures developed and implemented to augment traditional security programs (physical security, information or personnel security and communications security) as a means of eliminating or minimizing vulnerabilities that impact on classified technical programs. This includes a continuing review of program operations so that information of net intelligence value is not inadvertently provided to an adversary or potential adversary. (5636.3 A)

Operator

- 1: DOE employees who are regularly required to operate motor vehicles and whose positions are classified officially as motor vehicle operators. (3791.2A);
- 2: An individual designated by management to perform operations or conduct activities with radioactive materials at a nuclear facility. (5480.5)

Optimum interspersed hydrogenous moderation

The occurrence of hydrogenous material between containment vessels to such an extent that the maximum nuclear reactivity results. (5480.3)

Option

Option

An agreement in which a property owner gives the Government the right to acquire an interest in his or her property at a specified price within a specified time. (4300.1A)

Oral admonishment

A disciplinary discussion between a management official or supervisor having the authority to take disciplinary action and an employee subject to that authority. (3750.1, Change 3)

Oral history

The record or transcript of an interview with a Department official, former official, government employee, contractor, or other person conducted in conjunction with a history project. Such records or transcripts, and all pertaining literary rights, are presented as gifts to the Department in accordance with Section 652 of the Department of Energy Organization Act, or to NARA in accordance with 44 U.S.C. (1324.7)

Order

1: The whole or a part of final disposition, whether affirmative, negative, injunctive, or declaratory in form, of an agency in a matter other than rulemaking but including licensing. (1900.1D); 2: . . . An order is formulated through an adjudication, which is defined in section 554 of the Administrative Procedure Act as a hearing on the record required by statute. (1900.2B)

Organizational administrative or security officer

An official who has management authority within DOE or a contractor organization. (5635.3)

Organizational conflict of interest

Describes a relationship or situation in which an offeror or a contractor (including chief executives and directors, to the extent that they will or do become involved in the performance of the contract, and proposed consultants or subcontractors in which they may be performing services similar to the services provided by the prime contractor) has past, present, or currently planned interests that either directly or indirectly relate to the work to be performed under a Departmental contract and that:

continued on next page

Organizational conflict of interest (continued)

- (a) may diminish the capacity of the offeror or contractor to give impartial, technically sound, objective assistance and advice; or
- (b) may result in an unfair competitive advantage. The term does not include the normal flow of benefits from the performance of the contract.

(4220.4)

Original classification

The initial determination by an original classifier that information requires protection as NSI under the provisions of Executive Order 12356. Includes the specification of a classification level and the classification duration.

(5635.1A)

Originator

The DOE or contractor employee who originates the safety concern report.

(5000.XYZ)

Other administrative offset collections

Includes amounts offset against payments due a former employee from lump-sum leave payment, severance pay, and the Civil Service Retirement and Disability Fund under 31 U.S.C. 3716 and amounts offset under a pre-existing statute which authorized offset in particular situations but does not provide its own due process procedures. (2200.2A)

Other deposits

- (a) **Service deposits** Deposits with utility and transportation companies, required as a basis for service by them and returnable at the conclusion of their contracts.

continued on next page

Other deposits

Other deposits (continued)

- (b) **Deposits on returnable containers** Deposits with vendors for containers when the containers are expected to be returned upon removal of the contents. If it is known at the time of receipt that the containers in a particular shipment will not be returned because they will be used in a contaminated area, because the cost to ship them back to the supplier would exceed the amount of the deposit, or for some other acceptable reason the deposit should not be recorded in other deposits but should be recorded in the inventory, plant and equipment, or expense account, depending upon their nature.
- (b) **Deposits on returnable containers (continued)**
Since some vendors require only token or nominal deposits on containers but demand full costs if they are not returned, the full amount to be paid for the containers should be recorded when a determination is made that they are not to be returned. The cost to DOE for vendors' containers that are retained by DOE or its contractors for their own use as returnable containers should be charged to the stores account; the cost to DOE of special containers to hold or transport process materials should be charged to the completed plant and equipment account if the containers meet the criteria for retirement units stated in DOE 2200.6, FINANCIAL ACCOUNTING, Chapter VI, Plant and Capital Equipment; the cost to DOE of vendors' containers that are destroyed or that for any reason other than those stated in the preceding sentence, are not returned should be charged to the cost of operations or included in the cost of the materials they contain (on a consistent basis, of course).
- (c) **Miscellaneous deposits** Deposits that cannot be classified under either of preceding the categories.

(2200.4)

Other federal agency arrangements

See Reimbursements. (2200.4)

Outgrant

A right to use DOE real property by means of a lease, easement, license, or permit. (4300.1B)

Overpressure

Outlay program managers

Headquarters officials who have lead line responsibility for the execution of authorized programs with appropriated funds. (5632.1A); 2: Assistant Secretaries for Conservation and Renewable Energy; Environment, Safety, and Health; Nuclear Energy; Fossil Energy; Defense Programs; and the Directors of Energy Research and Civilian Radioactive Waste Management manage the Headquarter's organizations responsible for outlays of Federal funds other than for salaries and expenses (a resource sponsor). (4300.1B)

Outlays

The amount of checks issued or funds electronically transferred, interest accrued on most public debt, or other payments; net of refunds; and reimbursements. Total budget outlays consist of the sum of the outlays from appropriations and funds included in the unified budget, less offsetting receipts. The outlays of off-budget federal entities are excluded from the unified budget under provisions of law, even though these outlays are part of total government spending. Federal outlays are recorded on the cash basis of accounting, with the exception of most interest on the public debt, for which the accrual basis of accounting is used. (2200.4)

Outlier

An extreme value in a data set so far removed from the other values with which it is associated that the chance probability of its being a valid member of the group is very small. Such a questionable value may be eliminated from the group on the basis of further statistical investigations of the data set. (5400.XY)

Out of cycle items

New major items of ADPE which are planned to be acquired in a fiscal year and have not been identified and justified in that fiscal year's congressional budget request. (1360.1A)

Overpressure

The maximal effective pressure is the highest of:

- (a) the peak incident pressure;
- (b) the incident plus dynamic pressure; or
- (c) the reflected pressure.

(TM 5-1300) (6430.1A)

Oversight committee

Oversight committee

The congressional committee charged with general oversight of the operation of an agency or program. In some but not all cases, the oversight committee for an agency also is the authorizing committee for the agency's programs.

See Authorizing committee. (2200.4)

DOE DEFINITIONS

P

Package

1: For radioactive materials, is the packaging, together with its radioactive contents, as presented for transport. (1540.3); 2: The package, together with its contents, as presented for transportation. (1540.1); 3: Packaging and/or radioactive contents. (5480.3); 4: Means, for radioactive materials, the packaging together with its radioactive contents as presented for transport. (1540.2, Change 1)

Packaging

1: For radioactive materials, is the assembly of components necessary to ensure compliance with the packaging requirements of Title 49 CFR, subpart I DOE 1540.2 and DOE 5480.3. It may consist of one or more receptacles, absorbent materials, spacing structures, thermal insulation, radiation shielding, and devices for cooling or absorbing mechanical shocks. The conveyance, tie-down system, and auxiliary equipment may sometimes be designated as part of the packaging. (1540.3) (1540.2, Change 1); 2: One or more receptacles and wrappers and their contents excluding fissile material and other radioactive material, but including absorbent material, spacing structures, thermal insulation, radiation shielding, devices for cooling and for absorbing mechanical shock, external fittings, neutron moderators, nonfissile neutron absorbers, and other supplementary equipment. (5480.3A); 3: The assembly of containers and any other components attached thereto, including inner receptacles, absorbent material, supporting structure, thermal insulation, and supplementary attached equipment. (1540.1)

Paid claims

Include benefits actually paid during the accounting period/policy year. The meaning of paid depends upon the accounting practices of the insurance company, and supplementary. In some cases a claim is paid when the benefit check is written. In other cases a claim is "paid" when the benefit draft clears the banking system and is recorded in the home office records of the insurance company. (3890.1)

Parent or legal guardian

A designee who exercises the legal rights of a minor or an individual declared incompetent due to physical or mental incapacity or age by a court of competent jurisdiction. (1800.1A)

Partial set-aside**Partial set-aside**

The reservation of a portion of an acquisition for award to small business or labor surplus area concerns or both. (4250.1)

Participant

1: A DOE contractor, borrower, or party to an interagency agreement. (1332.1A); 2: See Cosponsor. (2200.4)

Participating organization

A term used to describe a departmental element which is participating in the program. (1500.4)

Particle

An aggregate of molecules forming a solid or liquid that ranges in size from a few molecular diameters to a few millimeters. (5400.XY)

Pass

A temporary authorization to enter an access controlled facility or security area. (5632.1A)

Passengers

Occupants of aircraft who do not have assigned flight duties or other duties related to the mission to which the aircraft is assigned. (5480.13)

Password

A protected word, phrase or a string of symbols that is used to authenticate the identity of a user. (5637.1)

Password space

The total number of possible passwords that can be created by a given password generation scheme. (5637.1)

Past service costs

The amount which, together with the present value of future to normal costs, will be exactly sufficient to provide all future benefits of the group included in the actuarial valuation. (3830.1)

Paying agency

1: The federal agency making a disbursement in payment an amount, e.g., due to individuals or other government agencies. (2200.4); 2: An agency employing the individual and disbursing his or her current pay account. (2200.2A)

Payment date

The date on which a check for payment is dated or a wire transfer is made. (2200.4)

Payments in lieu of taxes

Discretionary payments made to render financial assistance to those states and local governments in which the Department or one of its predecessor agencies has acquired property previously subject to state or local taxation and on which the Department carries on activities authorized by the Atomic Energy Act of 1954, as amended. (2100.12)

Peak positive incident pressure

The almost instantaneous rise from the ambient pressure caused by a blast wave's pressure disturbance. (6430.1A)

Penalties

Assessments of 6 percent per annum, in addition to interest, for failure to pay any portion of a debt more than 90 days past due. (2200.2A)

Penetration

The passage of some material through a filter or other collector. (5400.XY)

Pension plan

Defined programs established and maintained to provide payments to employees following retirement. Future payments are definite benefits determined and provided from either defined benefit plans, defined contribution plans, or a combination thereof. Plan benefits may be self-insured where the investment of the funds is handled by plan trustees. Alternatively, plan funds may be placed with an insurance company involving one of the following arrangements: totally insured (individual or deferred group annuities are purchased), partially insured (annuities are purchased at actual retirement—i.e., deposit administration or immediate participation guarantee), or uninsured (where no annuities are purchased—i.e., investment only type). (3830.1)

Performance assessment

A systemic analysis of the potential risks posed by waste management systems to the public and environment, and a comparison of those risks to established performance objectives. (5820.2A)

Performance audit

Performance audit

A quantitative check of an analytical procedure with a material or device with known properties or characteristics to verify the accuracy of a project measurement system. The audit is usually performed by a person different from the routine operator/analyst, using standards and equipment different from the calibration equipment. (5400.XY)

Performance-based training

A systematic approach to training which is based on tasks and the related knowledge and skills required for competent job performance. (5480.18)

Performance measurement baseline

The time phased budget plan against which contract performance is formally measured. It is formed by the budgets assigned to scheduled cost accounts and the applicable indirect budgets. For future effort, not planned to the cost account level, the performance measurement baseline also includes budgets assigned to higher level organizations and contract work breakdown structure elements and undisturbed budget. It will reconcile to the contract budget base. It equals the budget at completion less the management reserve budget. (2250.1C)

Performance testing laboratory

A calibration laboratory designated by the DOE Laboratory Accreditation Administrator to test dosimeters. For responsibilities and authorities see 9b. (5480.15)

Performance tests

Tests of selected elements of the operations offices' protection program establish how effectively those elements meet protection requirements. The tests are onsite reviews of how the personnel, equipment, and procedures of the protection program element operate to produce the desired protection result. A performance test may be as simple as a badge check at a guard post, or as complex as a force-on-force exercise involving the protective force. Performance tests may be conducted in any protection program topical area. (5630.12)

Performing organizations

DOE-operated laboratories, DOE contractors and federal assistance recipients, and their contractors and subcontractors, as well as federal, private, nonprofit, and international organizations, which have agreements with DOE that produce scientific and technical information or obtain scientific and technical information products or services with DOE funds. (1430.1A)

Periodic maintenance

Maintenance accomplished on a routine basis (operating hours or calendar time), which may include any combination of inspections, alignments or calibrations, overhauls and component or equipment replacements.

(5480.MAINT)

Permafrost

A permanently frozen layer of variable depth below the earth's surface in frigid regions. (6430.1A)

Permanent exemption

A release from a mandatory standard of this Order. Such exemptions are not time-specified. (5480.4, Change 1)

Permanent records

1: Records that have been determined, by NARA to have historical or other value warranting permanent preservation. Such determinations are reflected in the Authorized Disposition columns of the GRS and DOE Records Schedules, as appropriate. Normally, permanent records are offered to NARA when they are 25 years old. (1324.2A); 2: Any record that has been determined by the Archivist of the United States to have sufficient historical or other value to warrant its continued preservation by the Government. DOE 1324.2, Page III-23, paragraph 13, provides additional guidance. (1324.4)

Permanent variance

A release from a DOE-prescribed OSHA standard. Such variances are not time-specified. (5483.1A)

Permit

A temporary right of exclusive or nonexclusive use of real property. It is generally applicable to granting another Federal agency the right to use DOE property, or vice versa. (4300.1B)

Person

Any individual, corporation, partnership, association, or any other organized group of persons, including any agency of the United States Government or any other government. (5560.1A)

Personality disorder

Personality disorder

An emotional or mental condition manifested by maladaptive behavior and impaired social or occupational function. (5480.YY)

Personal papers

1: Papers of a private or nonofficial character which pertain only to an individual's personal affairs and that are kept in the office of a DOE contractor official. They must be clearly designated by the official as nonofficial and will at all times be filed separately from official records. (1324.2A) (1324);

2: Personal papers consist of documents of a private or nonofficial character which pertain only to an individual's personal affairs, and which must be kept in the offices of Federal officials since they overlap official responsibilities.

Personal papers must be clearly designated as nonofficial records and will at all times be filed separately from official records. If matters requiring the transaction of official business are received in private personal correspondence, that portion of such correspondence that pertains to official business will be extracted and made part of the official records. (1324.3);

3: Legally defined 36 CFR 1222.20(d), and standards are prescribed for their maintenance as follows. "Papers of a private or nonofficial character which pertain only to an individual's personal affairs that are kept in the office of a Federal Official will be clearly designated by him as nonofficial and will at all times be filed separately from the official records of his office. In cases where matters requiring the transaction of official business are received in private personal correspondence, the portion of such correspondence that pertains to official business will be extracted and made part of the official files..."

(1324.11)

Personal property

1: Movable items not permanently affixed to, and a part of, the real estate.

Generally items remain personal property if they can be removed without serious injury either to the real estate or to the items themselves. (5632.1A);

2: Generally, movable items, that is, those not permanently affixed to and/or considered to be) a(n) integral part of the real estate. Generally, but with exceptions, items remain personal property if they can be removed without serious injury either to the real estate or to the items themselves. (4330.4)

(4300.1B)

Personal security review examiners

Are persons appointed by Assistant Secretary for Defense Programs (DP-1) who are designated to review questions concerning the eligibility or continued eligibility of individuals described in 10 CFR 710.20. Examiners shall be U.S. Citizens and have a DOE Q access authorization. (5631.2B)

Personnel dosimetry program

Personnel assignment agreement

An agreement between participating institutions involved in sending and receiving an assignee. These agreements cover the detailed aspects of carrying out an assignment such as programmatic purpose, references to applicable program agreement, method of handling finances, essential rules, regulations, training for personnel safety, and designation of requirements for access to facilities used in the assignment, etc. The receiving institution will normally be that legal entity managing the involved DOE facility, whereas the sending institution can be one of a variety of organizations depending upon the arrangements made in the country representing the sending side. Each personnel assignment agreement shall contain an annex to be signed by the assignee certifying acceptance of and compliance with the terms of the agreement. (1240.2A)

Personnel assurance program

A program that establishes the requirements and responsibilities for screening, selecting, and continuously evaluating employees being considered for assignment or assigned to critical nuclear explosive duties. (5610.3) (5610.11)

Personnel assurance program certification

The certification by a manager of an operations office that an employee meets the prescribed standards and is suitable for assignment to critical duties. (5610.3)

Personnel dosimeter

A device containing one or more radiation-responsive elements (e.g., film, thermoluminescent, nuclear track detector) and possibly one or more absorbers. For the purpose of this Order, personnel dosimeter means the type of dosimeter expressly designed for extremities such as finger ring or wrist dosimeter. (5480.15)

Personnel dosimetry program

A program using personnel dosimeters to determine, record, report, and archive the dose equivalents received by personnel. (5480.15)

Personnel screening

Personnel screening

A protective measure applied to determine that an individual's access to sensitive unclassified automated information is admissible. The need for and extent of a screening process is normally based on an assessment of risk, cost, benefit, and feasibility as well as other protective measures in place. Effective screening processes are applied in such a way as to allow a range of implementation, from minimal procedures to more stringent procedures commensurate with the sensitivity of the data to be accessed and the magnitude of harm or loss that could be caused by the individual. Guidelines on screening non-Federal employees are available from the Office of ADP Management. (1360.2A)

Personnel security

The procedures established to ensure that all personnel who have access to any unclassified information have the required authorizations, as well as the appropriate clearances. (5637.1)

Personnel Security Assurance Program (PSAP)

A program to ensure that the employment and retention of individuals in PSAP positions is consistent with the requirements of national security. This program reduces risk to national security through the close evaluation, selection, and monitoring of individuals holding a Q(R) clearance. (5631.6)

Personnel security interview

A meeting held with an individual to discuss areas of security concern. (5631.2B)

Personnel security specialist

For the purposes of this Order, a DOE employee with the responsibility for reviewing the results of the security investigation and other information of a security interest, and recommending disposition of a request for a Q(R) access authorization. (5631.6)

Pervious

That property of a surface that allows water or other fluids to pass through. (6430.1A)

pH

A term used to describe the hydrogen-ion activity or concentration of a solution. (6430.1A)

Physical security

Physical inventory

The quantity of nuclear material which is determined to be on hand by physically ascertaining its presence using techniques that include sampling, weighing and analysis. (5633.3, Change 1)

Physical or mental impairment

Any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological, musculoskeletal, special sense organs, cardiovascular, reproductive, digestive, genito-urinary, hemic and lymphatic, skin and endocrine; or any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities. (1600.5) (3300.2)

Physical protection facility

A facility, other than a security facility, which contains property owned, leased, or contracted by the U.S. Government for the use of the Department, its contractor, and subcontractors and in which significant monetary value, national security, program, continuity, or protection of the public health and safety constitutes an important responsibility of the Department. (5632.1A)

Physical protection (Physical security)

1: The application of methods for preventing diversion of nuclear material or for detecting such diversion as it occurs. (6430.1A); 2: The application of methods for preventing malevolent acts against DOE safeguards and security interests, detecting such acts as they occur, and responding to such acts. Available methods include, for example, couriers, guards, vaults, and alarm systems. They do not include such things as seals, in-line instruments, or area monitors of the recording type, as distinguished from alarms. (5634.1A)

Physical security

1: The combination of operational and security equipment, personnel, and procedures used to protect facilities, information, documents, or material against theft, sabotage, diversion, or other criminal acts. (5650.3, Change 1); 2: The use of locks, guards, badges, alarms, procedures, and similar measures (alone or in combination) to control access to the classified ADP system and related equipment. The measures required for the protection of the structures housing the classified ADP system, related equipment, and their contents from espionage, theft, waste, fraud, abuse, or damage by accident, fire, and environmental hazards. (5637.1)

Physically separated

Physically separated

Set apart by distance, fences, wall or similar obstructions. (6430.1A)

Pistol

A short firearm that can be fired with one hand.

- (a) **A double action semiautomatic pistol** Magazine-fed and can be selectively fired with a single pull of the trigger with the hammer in either the cocked or uncocked positions.
- (b) **A machine pistol** Capable of being fired in the fully automatic mode.
- (c) **A single action semiautomatic pistol** Magazine-fed, must be fired with the hammer in the cocked position, and will fire one shot each time the trigger is pulled.
- (d) **Revolver** A firearm (most commonly a pistol) with a cylinder of several chambers so arranged as to revolve, on an axis and be discharged in succession by the same lock.

(5480.16, Change 2)

Planned maintenance

Maintenance performed before equipment failure which is normally initiated by predictive or periodic maintenance results, vendor recommendations, material history or experience. (5480.MAINT)

Plastic yielding

The point at which permanent deformation occurs when tensile stress is imposed on a material. (6430.1A)

Plate out

A thermal, electrical, chemical, or mechanical action that results in a loss of material by deposition on surfaces. (5400.XY)

Policy and objectives

Plume exposure pathway

1: The principal exposure sources for this pathway are: (a) whole body external exposure (gamma radiation) and/or contact exposure to skin or eyes (toxic materials) from the contact with materials from the plume and from deposited material; (b) inhalation and absorption of constituents in the passing plume. For the plume exposure pathway, shelter and/or evacuation would likely be the principal immediate protective actions to be recommended for personnel. (5500.1A, Change 1); 2: The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from the plume and from deposited material; (b) inhalation exposure from the passing radioactive plume. For the plume exposure pathway, shelter and/or evacuation would likely be the principal immediate protective actions to be recommended for personnel. (5500.3, Change 1)

Plutonium processing and handling facility

Any facility constructed primarily to process plutonium (including Pu-238) and that handles substantial quantities of in-process plutonium where there is a possibility of a release of plutonium to the environs under normal operations or design basis accident conditions in excess of limits set forth in the directive on Radiation Protection of the Public and the Environment in the DOE 5400 series. (6430.1A)

Plutonium storage facility

Any facility constructed to store strategic Category I quantities of plutonium. (6430.1A)

Point of nearest public access

Location inside or outside the site boundary where a member of the public could legally be (e.g., visitor center or public highway) without the specific knowledge of the owner or operator. (6430.1A)

Point source

The single defined point (origin) of an airborne release such as a stack or vent. (5400.XY)

Policy and objectives

It is the policy of the Department to provide to the public and the news media accurate and timely unclassified information on all Departmental policies and programs. The objective of this Order is to assure that timely accurate information is readily available to the public for news media activities related to Department policies, programs, and projects. (1200.1)

Portal monitors

Portal monitors

Any electronic instrument designed to perform scans of personnel and vehicles leaving a designated area. (5633.3, Change 1)

Portion marking

The application of NSI classification markings to individual portions of a document to indicate their specific classification level. (5635.1A)

Portland cement

A mixture of lime- and clay-bearing materials that are calcined to form a clinker, which is then pulverized, to form a fine powder for mortar and concrete mixtures. (6430.1A)

Positive measures

1: Such measures as administrative controls, safety rules, procedures, and directives, as well as physical, electrical, and mechanical restraints to prevent accidental or unauthorized detonation (high explosive or nuclear) of a nuclear explosive. (5610.3); 2: Design features, safety rules, procedures, or other controls used individually or collectively to provide nuclear explosive safety. Positive measures are intended to assure a safe response in applicable operations and be controllable. Some examples of positive measures are: strong-link switches; other safety devices; administrative procedures and controls; general and specific nuclear explosive safety rules; design control of electrical equipment and mechanical tooling; and physical, electrical, and mechanical restraints incorporated in facilities and transport equipment. (5610.10) (5610.11)

Post-publishing evaluation

The establishment of a means for measuring the effectiveness of a given publication. This process may involve a response card for users, a direct contact with users, or other means for establishing the value of the document. (1340.1A)

Powered industrial equipment

Fork trucks, tractors, platform lift-trucks, and other similar specialized industrial equipment powered by an electric motor or an internal combustion engine. (3791.2A)

Practical road test

OPM Test No. 544 or similar road tests developed by or acceptable to DOE for evaluation of the competency of prospective operators. (3791.2A)

Premium transportation

Prearming

- 1: The operation whereby the explosive initiation system of a nuclear explosive is connected to a power source in such a manner that with proper arming, firing, or release signals, the nuclear explosive will be detonated. (5610.3);
- 2: Configuring a nuclear explosive in such a manner that with proper arming and firing signals the nuclear explosive could be detonated. (5610.11)

Precious metals

For the purpose of this Order, defined as gallium, gold, iridium, osmium, palladium, platinum, rhodium, ruthenium, silver, or any combination of these metals. (1540.1)

Precision

- 1: The degree of exactness of performing an analytical procedure. (5400.XY);
- 2: As distinguished from accuracy, a quantitative measure of the variability of a set of repeated measurements. (5633.3, Change 1)

Predictive maintenance

The continuous or periodic monitoring and diagnosis of equipment in order to predict or forecast failure. (5480.MAINT)

Preferential procurement programs

Mandatory source programs such as Federal Prison Industries and the workshops administered by the Committee for Purchase from the Blind and Other Severely Handicapped under the Wagner-O'Day Act. Also included are small, minority and disadvantaged businesses, labor surplus area set-asides, and awards made under section 8(a) of the Small Business Act. (4510.1A, Change 1)

Preliminary Safety Analysis Report (PSAR)

See Safety Analysis Report (SAR). (6430.1A)

Premium transportation

The carriage of any person or commodity between two points by any method other than the most economical. When complying with all applicable laws, rules, regulations, and security requirements, transportation requirements are specific and are not considered premium. Under certain conditions, time in transit or time required to arrive at destination precludes the use of a lower cost method for carriage and is likewise not considered premium. (1540.1)

Prepayment**Prepayment**

See Advance. (2200.4)

Preproduction

Those Phase 3 & 4, Development and Production Engineering, activities that prepare processes for components, subsystems or systems expected to proceed into production. (QC-1, Rev. 5)

Preventive maintenance

1: Includes predictive, periodic and planned maintenance actions taken to maintain a piece of equipment within design operating conditions and extend its life. (5480.MAINT); 2: The use of periodic inspections, adjustments, lubrications, and minor repairs particularly of equipment for the purpose of both extending its useful life and reducing the frequency and magnitude of breakdown repairs. (4330.4)

Prices

The monetary amounts generally established and published for recurring sales of the same materials and services. (2110.1A)

Primary accounting system

A major category of the Single Integrated Financial Management System. The Departmental Primary Accounting System (DPAS), a major component of the SIFMS, is comprised of those inventoried Department level FMSs that achieve funds allocation, program and administrative accounting and financial reporting. Components of DPAS are the Funds Distribution System (FDS), the Departmental Integrated Standardized Core Accounting System (DISCAS), and the Financial Information System (FIS) that incorporates the U.S. Government Standard General Ledger (SGL) accounts. (2200.12)

Primary Action Activity (PAA)

Any head of a departmental element assigned staff management responsibility for the functional activity or program which is the principal subject of a GAO report. (2340.1B)

Primary confinement system

See Confinement area. (6430.1A)

Primary coolant

A gas, liquid, or solid, or combination of them, in contact with radioactive material, or if the material is in special form, in contact with its capsule, and used to remove decay heat. (5480.3)

Probable maximum flood

Primary document

Means those reports that are major, discrete portions of a remedial investigation/feasibility study or remedial design/remedial action. (5400.4)

Primary emergency plans

Plans prepared by field offices to guide the response of field elements and contractors for major emergencies having departmental, national, or international implications. (5500.1A, Change 1)

Primary recipient

Any person, group, organization, state, or local unit of government that extends DOE assistance to another recipient for the purpose of carrying out a project, program, or activity. (1600.6)

Principal Officers

The Secretary, Deputy Secretary and Under Secretary. (2020.1)

Printing

The processes of composition, platemaking, imposition, presswork, binding, micropublishing, and the equipment identified in the tables in Title II of the JCP regulations and used in such processes. (1340.1A)

Printout

A printed listing of the contents of an automatic data processing storage device or selected parts of it. (5635.1A)

Privacy Act Officer

An official designated by the Director of Administration (MA-2) to administer the Privacy Act. (1800.1A)

Private vehicle

Any transport vehicle that is owned or leased by an individual and is operated for the benefit of that person. (5480.3A)

Probable maximum flood

The hypothetical flood (peak discharge, volume, and hydrograph shape) that is considered to be the most severe reasonably possible, based on comprehensive hydrometeorological application of maximum precipitation and other hydrological factors favorable for maximum flood runoff such as sequential storms and snowmelts. (6430.1A)

Procedures

Procedures

Procedures prescribe or describe work. (QC-2)

Process holdup

The amount of nuclear material remaining in process equipment and facilities after the in-process material, stored materials, and product have been removed. Estimates or measured values of materials in holdup may be reflected in the facility's inventory records. (5633.3, Change 1)

Procurement initiation

The process by which the contracting officer accepts and begins action on a procurement request that has been properly approved by the program official authorized to allocate program funds and has been committed and recorded by the appropriate field financial office. For any individual procurement request, the dollar amount of the program initiation and the dollar amount of the procurement initiation will be identical. (2200.4)

Procurement request package

The procurement request documentation that is appropriate to the supplies or services required and their estimated value, including the procurement request document, statement of work or specifications, DOE F 4220.2, Section 8(a)/ Small Business/LSA Set-Aside Review, and, if appropriate, the justification for other than full and open competition. (4250.1)

Production agency

A DOE contractor responsible for the direct procurement or production of DOE weapons and weapons-related material. The term production applies to the processing of new and reused material and repair, modification, surveillance, test, disassembly, and reassembly operations. (QC-1, Rev. 5)

Production rate information

Information relating to the capacity to produce or actual production of:

- (a) weapons or weapon components;
- (b) plutonium, tritium, or enriched lithium-6;
- (c) uranium enriched in the isotope-235;
- (d) uranium-233.

(5635.1A)

Production rate or stockpile quantity information

Classified data related to production rates of weapons or weapon components, or to stockpile quantities of weapons or weapon components. (5631.4)
(5610.2)

Proficiency testing

A special series of planned tests to determine the ability of field technicians or laboratory analysts who normally perform routine analyses. The results may be used for comparison against established criteria, or for relative comparison with the results from another group of technicians or analysts. (5400.XY)

Program

1: Generally defined as an organized set of activities directed toward a common purpose, objective, or goal, undertaken or proposed by an agency to carry out responsibilities assigned to it. In practice, however, the term has many uses and thus does not have a well-defined, standardized meaning in the legislative process. Program has been used as a description for agency missions, activities, services, projects, and processes. (2200.4); 2: The GSA Travel and Transportation Expense Program used to pay for major travel and transportation expenses. (1500.4)

Program determination

An authorization by FEMA of the amounts and kinds of controlled materials which may be procured or used by or for a delegate agency, or which may be allotted by a delegate agency, for authorized programs during specified periods of time. (5560.1A)

Program financial system

Those FMSs within the Single Integrated Financial Management System that carry out unique program and operating functions as well as financial management. The five Power Marketing Administration's FMSs constitute this category of systems. (2200.12)

Program initiation

An administrative recording by the program office that a procurement action has been requested from program funds. The dollar amount of the program initiation must equal the dollar amount on the procurement request. (2200.4)

Program Manager

Program Manager

1: The DOE Headquarter's (HQ) individual, designated by and under the direction of a Program Senior Official, who is directly involved in the operation of facilities under his or her cognizance and with signature authority to provide technical direction through DOE field elements/field organizations to contractors for these facilities. (5480.19) (5000.3A); 2: An individual in an organization or activity responsible for the management of a specific function or function and responsible for budget formulation and execution of the approved budget. The individual is the recipient of an approved funding program from the Office of Budget, identifying his or her program dollars available to accomplish the assigned function. (2200.4); 3: For the purpose of this Order, Program Managers are defined as Heads of Departmental Elements or other individuals authorized by these officials to exercise the authorities described in this Order. (1430.1A)

Programmatic equipment

Includes that used purely for programmatic purposes, e.g. manufacturing, reactors, or accelerator machinery, or chemical processing lines, and items of similar nature. (4330.4)

Program office

A headquarter's organization which is responsible for assisting and supporting field organizations in safety and health, administrative, management, and technical areas, and reports to the cognizant program Secretarial Officer. (5483.1A) (5480.4, Change 1)

Program office director

Within the context of this Order, is a Senior DOE official with program or functional responsibilities who reports directly to a Secretarial Officer, from whose funds the requested foreign travel is to be paid. (1500.3)

Program/operation

Departmental Element of Department of Energy. (2320.2A)

Program planning level

The level of funding resulting from Secretarial decisions in the strategic program planning cycle. The justifications are written to this level. If an organization proposes to redistribute this allowance within its overall total, an explanation and justification for the redistribution must be included in the IRB submission (see Figure I-1). Organizations not participating in the planning process or not receiving specific fiscal guidance based on planning decisions will not have a predetermined program planning level. (5100.4)

Program Senior Official (PSO)

Program quality assurance actions

Include all planned actions necessary to ensure that the evaluations of internal control systems are performed in accordance with this Order and in a manner that produces reliable and verifiable data which support conclusions reached, any corrective actions taken, and assurances provided. (1000.3B)

Program release

A document initiated by program managers to execute their respective programs. The allotment provides the authority for the certifying official to certify fund availability on program release documents for a specific purpose, and these program release documents are the basis for establishing a commitment and, in some cases, obligation of funds. Examples of program release documents are travel orders, procurement requests, purchase orders, time and attendance cards, and other authorized documents. Funds must be certified on a valid program release document issued by an authorized program manager. (2200.4)

Program Secretarial Officer (PSO)

1: A Secretarial Officer of the Department who has responsibility for research and development missions and Departmental programs. (1300.3); 2: An Outlay Program Manager, which includes the Assistant Secretaries for Conservation and Renewable Energy, Fossil Energy, Defense Programs, and Nuclear Energy, and the Director of Energy Research. (5480.4, Change 1) (5483.1A); 3: As used in this Order, the Head of a first-tier Headquarters Element who is responsible for the assignment of work to the M&O contractor. (5700.7B, Change 2); 4: Officer of the Secretary, Secretarial Officers, and DOE Staff Officers. (5632.1A); 5: Headquarter's first level officials who have lead line responsibility for the execution of authorized programs with appropriated funds. (5630.13)

Program Senior Official (PSO)

1: A senior outlay program manager and includes the Assistant Secretaries for Conservation and Renewable Energy; Fossil Energy; Nuclear Energy; Defense Programs; and the Directors of Energy Research and Civilian Radioactive Waste Management. For purposes of this Order, this definition includes the Administrators of the Bonneville and Western Area Power Administrations. (5481.1B, Change 1) (5482.1B) (5400.1, Change 1) (5480.1B) (5700.6B, Change 1) (5480.XX); 2: Senior DOE Officials whose organizations are represented on the EEMT—e.g., Assistant Secretaries, Administrators, and General Counsel. (5500.8);

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Program Senior Official (PSO)

Program Senior Official (PSO) (continued)

3: For the purpose of this Order, a Program Senior Official is a Senior Outlay Program Manager. (5631.6); 4: Includes the Assistant Secretaries for Conservation and Renewable Energy, Defense Programs, Fossil Energy, and Nuclear Energy, the Director of Energy Research, and the Director of Civilian Radioactive Waste Management. For purposes of this Directive, this definition also includes the Administrators of the Bonneville and Western Area Power Administrations. (5480.YY); 5: Assistant Secretaries; Administrators of the Economic Regulatory Administration, the Energy Information Administration, Western Area Power Administration, and Bonneville Power Administration; General Counsel; Directors of the Office of Energy Research, Office of Civilian Radioactive Waste Management; and Office of Policy, Planning and Analysis. (5500.1A, Change 1) (5700.2C); 6: For this order only, is an Outlay Program Manager which includes the Assistant Secretaries for Fossil Energy, Defense Programs, Nuclear Energy, and Conservation and Renewable Energy, and the Directors of Energy Research and Civilian Radioactive Waste Management. (5480.10); 7: Includes the Assistant Secretaries for Conservation and Renewable Energy (CE-1), Fossil Energy (FE-1), Defense Programs (DP-1), Nuclear Energy (NE-1); the Director of Civilian Radioactive Waste Management, (RW-1); the Administrator of Bonneville Power Administration; and the Administrator of Western Area Power Administration. (5480.14); 8: Heads of DOE offices which have responsibility for specific facilities. These include: the Assistant Secretaries for Conservation and Renewable Energy; Nuclear Energy; Defense Programs; Fossil Energy; and the Directors of Energy Research; Civilian Radioactive Waste Management; New Production Reactors; and Environmental Restoration and Waste Management. (5000.3A); 9: Outlay Program Managers which include: The Assistant Secretaries for Conservation and Renewable Energy; Fossil Energy; Nuclear Energy; Environment, Safety, and Health; Defense Programs; and the Directors of Energy Research and Civilian Radioactive Waste Management. For the purposes of this Order, this definition also includes the Administrators of the Bonneville Power and Western Area Power Administrations. (5000.XYZ);

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Project design criteria

Program Senior Official (PSO) (continued)

10: Responsibilities are to monitor the Safety Concern Management System (SCMS) to assure that near and long term safety issues are addressed effectively. In addition, for the SCMS, PSO's shall:

- (a) provide clear and explicit delegations of authority and responsibilities;
- (b) take necessary management actions, including the requirement that budget proposals for their assigned functions provide adequate ES&H resources for the implementation of this Order;
- (c) provide EH-1 with copies of field organization implementation plans for the Safety Concern Management System;
- (d) perform program reviews to confirm effective implementation of field office Safety Concern Management Systems per the requirements of this Order;
- (e) respond to any outstanding safety concerns that cannot be resolved at the field office level; and
- (f) assure that safety concern reports that involve potential (a) DOE or contractor employee OSHA violations or (b) waste, fraud or mismanagement, shall be forwarded to the appropriate investigative organization(s).

(5000.XYZ)

Project

A major endeavor within a program, with firmly scheduled dates for beginning, intermediate, and ending milestones; prescribed performance requirements; prescribed costs; and close management planning and control. A project is not constrained to any specific element of the budget or accounting structure, e.g., operating or construction. (2200.4)

Project design criteria

Those technical data and other project information developed during the project identification, conceptual design and/or preliminary design phases. They define: the project scope, construction features and requirements, design parameters, applicable design codes, standards, and regulations; applicable requirements; and other requirements. The project design criteria are normally consolidated into a document that provides the technical base for any further design performed after the criteria are developed. (6430.1A)

Project numbers

Project numbers

Ten-character alphanumeric descriptions that identify nuclear materials for tasks or phases or work assigned to an Operations Office by Headquarters program organizations. Project numbers generally are derived from the DOE Budget and Reporting Classification System. (5660.1)

Project office

Those DOE offices that are established to manage special projects or programs under the purview of a Headquarter's Outlay Program office or a field organization. (4330.4)

Property

Goods and materials, including accountable quantities of nuclear materials, explosives, and other hazardous materials shipped by or for the account of the Department. (1540.1); 2: All Government-owned or leased property for which the Department has responsibility, except:

- (a) property furnished under contract requiring contractor assumption of the risk of loss or damage to Government-furnished property;
- (b) property covered by a private insurance policy specifying the Department of Energy as the beneficiary.

(5480.7)

Property eligible for payments in lieu of taxes

Real properties that are currently used for activities authorized by the Atomic Energy Act of 1954, as amended, that were on the tax rolls immediately prior to being acquired by the Government. In cases where activities are carried on that may create payments to State and local governments, based on legislation other than the Atomic Energy Act, such as the Nuclear Waste Policy Act, those parcels of land used for such other purposes shall be excluded from the computation of a payment in lieu of taxes, as prescribed by Section 168 of the Atomic Energy Act of 1954, as amended. (2100.12)

Property in the condition it was acquired

The physical description/definition and classification of the subject real property used to determine the real property's assessed valuation the last year the property was on the tax rolls prior to being acquired by the Government. (2100.12)

Property loss

The dollar cost of restoring damaged facilities or equipment to their original condition, whether or not such restoration actually occurs. In determining loss, the estimated damage to the building and contents shall include replacement cost, less salvage value, plus the cost of decontamination and cleanup. Effects upon program continuity, auxiliary costs of fire extinguishment, and consequent effects on related areas should be included if the effects can be determined. (5480.7)

Property protection area

1: An area set aside for the protection of property as required by these criteria. (6430.1A); 2: An area set aside for the protection of property, as required by this Order. (5632.1A) (5637.1)

Property protection facility

A facility other than a security facility. (5634.1A)

Property tax loss (to state or local government)

Considered to be taxes that would have been payable on such real property, based on the condition of the property when acquired by the government. (2100.12)

Proportional sample

An aliquot of samples consisting of a known fraction of the original samples. (5400.XY)

Proposed new system

A system of records for which a notice and report to the OMB and the Congress are being prepared. (1800.1A)

Proposed rule

A document that suggests amendments to DOE regulations in the CFR and requests public comments on those suggested changes; that begins a rulemaking proceeding; or relates to previously published proposed rules. (1900.1D)

Proposing official

The supervisor or manager who issues a notice of proposed adverse action to an employee. The supervisor or manager who issues an admonishment or reprimand to an employee is an issuing official. (3750.1, Change 3)

Proprietary information

Proprietary information

Information which contains trade secrets or commercial or financial information which is privileged or confidential, and may only include such information which:

- (a) has been held in confidence by its owner;
- (b) is of a type which is customarily held in confidence by its owner;
- (c) has not been transmitted by the transmitting party to other entities (including the receiving party) except on the basis that it be held in confidence; and
- (d) is not otherwise available to the receiving party from another source without restriction on its further dissemination.

(1240.2A)

Protect As Restricted Data (PARD)

1: The PARD designation is a handling method for computer-generated numerical data, or related information, which is not readily recognized as classified or unclassified because of the high volume of output and low density of potentially classified data. The above information is designated as PARD because it has not had a sensitivity (classification) review and must be protected under a different set of security rules. (5637.1); 2: The PARD designation is assigned to computer generated numerical data or related information for which it is not operationally feasible to establish a security classification because detailed knowledge of weapon design or other significant information is essential for determination or because of the high volume of output and low density of potentially classified data. (5635.1A)

Protected area

1: An area encompassed by physical barriers (e.g., walls or fences), subject to access controls, surrounding a material access area or containing Category II special nuclear material. (6430.1A); 2: An area encompassed by physical barriers, such as walls or fences, to which access is controlled, and that contains Category II SNM or surrounds a material access area or a vital area, and which meets the standards of this Order. (5632.1A); 3: An area encompassed by physical barriers (e.g., walls or fences), subject to access controls and which meets the standards of DOE 5632.6, Physical Protection Of DOE Property And Facilities, of 2-9-88. (5633.3, Change 1)

Protective actions

Protected Distribution System (PDS)

1: A telecommunications system to which acoustical, electrical, electromagnetic and physical safeguards have been applied to permit its use for secure electrical or optical transmission of unencrypted classified information or sensitive unclassified information. (5637.1); 2: Also called an approved circuit, this is a wireline or a fiber optic system which includes adequate acoustical, electrical, electromagnetic, and physical safeguards to permit its use for the transmission of sensitive unclassified and unencrypted classified information. A complete system includes the subscriber/terminal equipments, as well as the interconnecting wire lines or fiber optics. (5300.4B)

Protection force officer

A uniformed departmental contractor who is employed for, and charged with, the protection of classified matter, DOE property, or other government property and who is authorized to bear arms in accordance with DOE regulations or local and state authority. (5632.1A)

Protection index

A measure of perceived risk determined from the combination of the clearance level of users and the classification of the data on the classified ADP system. The determination of this index is described on page 1110-14, paragraph 5. (5637.1)

Protection of the public health and welfare

Control of fire, explosion, or effects of hazards to minimize potential injury to the public and damage to property not owned by the Department. (5480.7)

Protective Action Guides (PAG)

1: Projected numerical dose values established by EPA, DOE, or states for individuals in the population. These values may trigger protective actions that would reduce or avoid the projected dose. (5400.5, Change 1) (5400.XX); 2: A projected numerical radiation dose or hazardous material concentration to individuals in the population that may trigger protective response (an action taken to avoid or reduce the projected dose). Protective actions should reflect a balance of risks and costs to onsite personnel, public health and safety, and the environment against the benefits obtained from protective actions. See DOE 5500.3A for levels. (5500.1A, Change 1)

Protective actions

Actions taken during an emergency for the purpose of preventing or minimizing hazards. (5500.1A, Change 1)

Protective force personnel

Protective force personnel

Guards, security inspectors, couriers, authorized escorts, and personnel assigned to protective details, who are employed to protect the security interests of the Department. (5480.16, Change 2)

Protective measures

- 1: Physical, administrative, personnel, and technical security measures which, when applied separately or in combination, are designed to reduce the probability of harm, loss or damage to, or compromise of an unclassified computer system or sensitive and/or mission-essential information. (1360.2A);
- 2: Measures taken during an emergency for the purpose of preventing or minimizing hazards which are likely to develop if the actions were not taken. (5500.3, Change 1)

Protective personnel

Guards, security inspectors, couriers, authorized escorts, and personnel assigned to protective details who are employed to protect the security interests of the Department. (5632.1A)

Protective Response Recommendations (PRRs)

A projected numerical radiation dose to individuals in the population developed by DOE in cooperation with State and local governments which may trigger protective response (an action taken to avoid or reduce the projected dose). PRRs should reflect a balance of risks and costs to onsite personnel, public health and safety and the environment against the benefits obtained from protective actions. (5500.3, Change 1)

Protective service

Measures taken by commercial carriers upon request to provide physical protection for shipments, which is in addition to the protection furnished under the requirements of normal common carrier activity. See DOE 5632.1, Physical Protection of Classified Matter and Information and DOE 5632.2, Physical Protection of Special Nuclear Material, for additional information regarding degree of protection for property in transit. (1540.1)

Protracted theft or diversion

Theft or diversion resulting from repeated occurrences over an extended period of time. (5633.3, Change 1)

PSAP approving official

A senior DOE official with direct personnel security responsibilities appointed by an operations office manager to review all relevant information, including DOE F 5631.35, "PSAP Management, Medical, and Security Report" (see Attachment 1), as part of the DOE security review process, and who is responsible for granting or continuing a Q(R) access authorization, or determining that an individual be processed under the provisions of 10 CFR Part 710. (5631.6)

PSAP position

A position that affords the opportunity to remove or misuse Category I quantities of SNM, damage a nuclear material production reactor, or otherwise has potential to cause unacceptable damage to national security. (5631.6)

Psychosis

A serious mental disorder manifested by unpredictable breaks with reality in the spheres of time, place, or person, that make the individual unable to perform in a reliable, safe, and trustworthy manner. (5480.YY)

Public aircraft

Aircraft used only in the service of a government or political subdivision. This does not include any government-owned aircraft engaged in carrying persons or property for commercial purposes. (5480.13)

Publications

All documents produced by printing, copying, and microfilming methods using DOE funds which are intended for, or which may result in distribution, however limited, outside the originating organization. This includes, but is not limited to, public communications publications and scientific, technical, and engineering publication (14b). Not included in this definition are press releases and advisories, speeches (except when reprinted as a publication), correspondence, memoranda, forms, directives, and "Federal Register" issuances. Also excluded are solicitation documents, contracts, notices of procurement, grant program announcements, legal briefs, and patent applications. Please note that contracts, grants or other procurement actions that involve public communications publications must be reviewed by the Director of Public Affairs (CP-20) prior to such action. See Chapter III, paragraph 2a.

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Publications

Publications (continued)

- (a) **Public communication publications** Includes publications produced with DOE funds and intended for distribution by DOE, its contractors, or its financial assistance recipients to the public, including those of more limited circulation that involve policy changes, or matters of current public controversy or concern. These include, but are not limited to books, pamphlets, folders, booklets, posters, periodicals, newsletters, and similar printed material (see Chapter III).
- (b) **Scientific, technical and engineering publications** Includes all scientific and technical information prepared by or for DOE and used primarily by the program managers and the scientists, engineers, and technologists engaged in the work. This unclassified information is also made available for public sale through the National Technical Information Service (NTIS), U.S. Department of Commerce and includes such items as scientific and technical manuscripts, technical reports, machine readable bibliographic data bases, computer software programs, socio-economic and educational publications, journal article preprints and reprints, conference papers and proceedings, foreign trip reports, theses, translations, patents and patent applications, and engineering materials.

(1340.1A)

Public domain land

Land that the United States acquired from another nation by treaty, conquest, or purchase, ownership of which has never left the United States. These lands are administered by the Department of the Interior. (4300.1B)

Public official

An official, a member of the uniformed services, an employee, and any other individual, in whom is vested the authority by law, rule, or regulation, or regulation, or to whom the authority has been delegated, to appoint, employ, promote, or advance individuals, or to recommend individuals for appointment, employment, promotion, or advancement. (3308.1)

Pyrophoric material

Public traffic route distance

The minimum distance permitted between locations containing munitions and any public street, road, highway or passenger railroad (including roads on DOE-controlled land open to public travel). (5480.16, Change 2)

Public travel route

Any public street, road, highway, or passenger railroad including roads on DOE-controlled land open to public travel. (6430.1A)

Public vehicle

1: Surface vehicle which is either owned by or leased to a government agency, and which is operated by that agency. Examples of "Public Vehicle" are cited on page I-6, paragraph 12a(1). (1540.1); 2: Any transport vehicle, including highway vehicles, water-borne vehicles, aircraft, and railroad trains, that is either owned or leased to a Government agency, and which is operated by that agency in non-revenue producing service. Examples of "Public Vehicle" are cited on page I-6, paragraph 12(a)(11) of DOE 1540.1. Public vehicles operated by contractor become subject to regulations as if they were private vehicles. (5480.3A)

Pyrophoric-igniting spontaneously

Emitting sparks when scratched or struck especially with steel. (6430.1A)

Pyrophoric material

A material which under normal conditions is liable to cause fires through friction, retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious transportation, handling or disposal hazard. (5820.2A)

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DOE ORDER DEFINITIONS

Q

Q(R) access authorization

The designation of a security clearance determination that is reserved for individuals who occupy PSAP positions—sometimes referred to as a PSAP access authorization. (5631.6)

Qualified handicapped person

With respect to employment, is a handicapped person who, with or without reasonable accommodation, can perform the essential functions of the position in question without endangering the health and safety of the individual or others and who, depending upon the type of appointing authority being used: (a) meets the experience and/or education requirements (which may include passing a written test) of the position in question; or (b) meets the criteria for appointment under one of the special appointing authorities for handicapped persons. (1600.5)

Qualified safety and health inspector

A person meeting the Office of Personnel Management (OPM) standards as cited in 29 CFR part 1960.2(s) or inspector qualifications defined in 29 CFR part 1960.25 (a). (3790.1A)

Quality

1: Refers to the totality of features and characteristics of material, process, product, service, or activity that bears on its ability to satisfy a given purpose. (5400.XY); 2: Conformance to customer requirements and expectations. This includes the concept of closeness to target or nominal values, recognizing that any deviation from target results in a reduction in quality. (QC-2) (QC-1, Rev. 5)

Quality Assurance (QA)

1: Refers to those planned and systematic actions necessary to provide adequate confidence that a facility, structure, system, or component will perform satisfactorily and safely in service. Quality assurance includes quality control (QC), which comprises all those actions necessary to control and verify the features and characteristics of a material, process, product, or service to specified requirements. (5400.XY) (1330); 2: All those planned and systematic actions necessary to provide adequate confidence that a facility, structure, system, or component will perform satisfactorily and safely in service. Quality assurance includes quality control, which comprises all those actions necessary to control and verify the features and characteristics of a material, process, product, or service to specified requirements. (5820.2A);

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Quality Assurance (QA)

Quality Assurance (QA) (continued)

3: Involves all those planned and systematic actions necessary to provide adequate confidence that a facility, structure, system, or component will perform satisfactorily and safely in service. The goal of quality assurance is to assure that: research, development, demonstration, scientific investigations, and production activities are performed in a controlled manner; that components, systems, and processes are designed, developed, constructed, tested, operated, and maintained according to engineering standards, quality practices, and Technical Specifications/Operational Safety Requirements; and that resulting technology data are valid and retrievable. Quality assurance includes quality control, which comprises all those actions necessary to control and verify the features and characteristics of a material, process, product, or service to specified requirements. (5700.6B, Change 1) (6430.1A); 4: A planned and systematic pattern of all actions necessary to provide adequate confidence that the item or product conforms to established operational, functional, and technical requirements. (1330.1C); 5: All those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy given needs. (QC-1, Rev. 5); 6: A system of administrative and technical checks and balances by means of which the specified requirements for an operation are met. The term includes other related terms such as "quality control" and "compliance inspection." (5480.3A)

Quality assurance overview

An organized set of activities performed as independent functions. Its purpose is to assure that all aspects of quality-related activities at the program, project and contractor level of management are adequately addressed. Such activities include:

- (a) periodic and timely reviews of program/project documents, activities, actions and plans;
- (b) review of new major procurements and management and operating contracts;
- (c) review of extend/compete packages for management and operating contracts; and
- (d) review of DOE Orders with relevance to the incorporation of the DOE quality assurance policy, where necessary.

(5700.6B, Change 1)

Quality evaluation

Quality assurance plan

A document that contains or references the quality assurance elements established for an activity, group of activities, a scientific investigation or a project and describes how conformance with such requirements is to be assured for structures, systems, computer software, components, and their operation commensurate with; (a) the scope, complexity, duration, and importance to satisfactory performance; (b) the potential impact on environment, safety and health; and (c) requirements for reliability and continuity of operation. (5700.6B, Change 1)

Quality assurance records

Includes results of reviews, inspections, audits, and material analyses; monitoring of work performance; qualification of personnel, procedures, and equipment; and other documentation such as drawings, special reports, and corrective action reports. (6430.1A)

Quality assurance surveillance plan

Describes the standards used to determine whether the requirements in the Statement of Work have been met. (4510.1A, Change 1)

Quality Control (QC)

1: Refers to those actions necessary to control and verify the features and characteristics of a material, process, product, service, or activity to specified requirements. The aim of quality control is to provide quality that is satisfactory, adequate, dependable, and economic. (5400.XY); 2: An independent evaluation to ensure quality in a product. (1330) (1330.1C); 3: An evaluation to ensure that a final product conforms to established operational, functional, and technical requirements. (1330.1C)

Quality costs

The cost of nonconformance plus the cost of conformance. It includes the cost of prevention, appraisal and failure. (QC-1, Rev. 5)

Quality evaluation

A continuing program of evaluation to determine whether nuclear explosives and components are of satisfactory quality, to determine the degree of conformance to design intent, and to determine the status of stockpile functionality by means of periodic examination and test of randomly selected nuclear explosives and components. (5610.3)

Quality evidence

Quality evidence

Information which indicates the extent of conformance to requirements and control over processes. This information is based on process control data, inspection and acceptance activities, or traceability records. (QC-1, Rev. 5)

Quality factor (Q)

1: A modifying factor that is employed to drive dose equivalent from absorbed dose—paragraph 9f(5). (5480.11, Change 1); 2: The principal modifying factor used to calculate the dose equivalent from the absorbed dose. For the purposes of DOE 5400.3 and this Order, the following quality factors are to be used:

<u>Radiation Type</u>	<u>Quality Factor</u>
X-rays, gamma rays, positrons, and electrons (including tritium)	1
Neutrons, < 10 keV	3
Neutrons, < 10 keV Protons and single charged particles of unknown energy with rest mass greater than one atomic mass unit	10
Alpha particles and multiple-charged particles (and particles of unknown charge) of unknown energy	20

For neutrons of known energies, the more detailed quality factors given in DOE 5480.11 may be used. (5400.XY)

Quality improvement process

An iterative process employing systematic planning; analysis of data; implementing improvement actions; evaluating those actions for effectiveness; and recognition of accomplishments. (QC-1, Rev. 5) (QC-2)

Quantity distance

- 1: The distance required for a specific level of protection for a particular hazard class/division of ammunition and explosives. (5480.16, Change 2);
- 2: The quantity of explosives and the distance separation relationship that provides defined types of protection. These relationships are based on levels of risk considered acceptable for stipulated exposure and are tabulated in the appropriate quantity-distance tables in DOD 6055.9. Separation distances shall be considered minimum distances; greater distances should be used whenever practicable. (6430.1A)

Questionable cost

This term is unique to this Order is defined as the total cost, both questioned and unsupported, set out by the auditor in the audit report for consideration and resolution. The term has been developed to comply with direction for management reporting to DICARC, as well as external agency reporting. (2300.1A)

Questioned cost

Any cost proposed or claimed for payment or reimbursement that is recommended for disallowance by the auditor because it does not appear to meet one or more of the following criteria: reasonableness; allocability; cost accounting standards, where applicable; generally accepted accounting principles; applicable cost principles; or specific contract or financial assistance agreement provisions. Questioned cost does not include audited costs which are questioned only because total incurred costs exceed the limit established in a contract or financial assistance agreement. (2300.1A)

Quitclaim deed

An instrument that transfers any title, interest or claim the grantor may have in property, without a warranty that such title, interest, or claim is valid. Also known as a deed without warranty. It does not guarantee clear title and is not acceptable to convey property on which the Government intends to make permanent improvements. (4300.1B)

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DOE ORDER DEFINITIONS

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Radiation Emergency Assistance Center/Training Site

A multipurpose medical facility located in Oak Ridge, Tennessee, prepared to deal with all types of radiation exposure emergencies and provide medical and health physics advice and assistance in radiological emergencies.

(5500.1A, Change 1)

Radiation worker

An occupational worker whose job assignment requires work on, with, or in the proximity of radiation producing machines or radioactive materials, and/or who has the potential of being routinely exposed about 0.1 rem (0.001 sievert) per year, which is the sum of the annual effective dose equivalent from external irradiation and the committed effective dose equivalent from internal irradiation.

(5480 MAINT.) (5480.11, Change 1)

Radioactive material

1: Any material having a specific activity greater than 0.002 microcuries per gram ($\mu\text{Ci/g}$). (1540.3) (1540.2, Change 1); 2: Refers to any material or combination of materials that spontaneously emits ionizing radiation. (5400.XY)

Radioactive mixed waste

Waste containing both radioactive and hazardous components regulated by the AEA and RCRA, respectively. The term "radioactive component" refers only to the actual radionuclides dispersed or suspended in the waste substance.

(5400.3)

Radioactive waste

Solid, liquid, or gaseous material that contains radionuclides regulated under the Atomic Energy Act of 1954, as amended, and of negligible economic value considering costs of recovery. (5400.3) (5400.2A) (5820.2A)

Radioactivity

Means the property or characteristic of radioactive material to spontaneously "disintegrate" with the emission of energy in the form of radiation. The unit of radioactivity is the curie (or becquerel). (5400.5, Change 1) (5400.XX)

Radio circuit discipline

Minimizing transmission time by limiting the number and length of transmission and communications to only mission essential items. (5632.1A)

Radiological Assistance Program (RAP)

Radiological Assistance Program (RAP)

1: A DOE program for organizing responsibilities, policies, and guidelines for Headquarters and Field organizations' radiological assistance operations to cope with incidents involving radioactive materials. (5530.1); 2: A DOE program which provides for radiological assistance to Federal, State and major Nuclear Regulatory Commission Licensees in the event of an incident involving radioactive materials. (5500.1A, Change 1)

Radiological assistance team

DOE or DOE-contractor professionals who are adequately equipped to conduct offsite radiological emergency monitoring. Radiological assistance teams are located at DOE operations offices and national laboratories, and most area offices and associated contractor sites. (5500.1A, Change 1)

Radiological emergency

A condition caused by the loss of control of radioactive material which presents a potential hazard to onsite personnel, public health and safety, and the environment exceeding established limits for exposure to ionizing radiation. (5500.3, Change 1)

Radionuclide

Refers to a radioactive nuclide. There are several hundred known radionuclides, both produced and naturally occurring; radionuclides are characterized by the number of neutrons and protons in an atom's nucleus. (5400.XY)

Radionuclide emissions

Releases of airborne radioactive materials to the environment. (5400.XY)

Radio repeater stations

Unmanned radio transmission facilities, usually located in remote areas. (6430.1A)

Random error

1: The deviation of a random variable from its expected value. (5633.3, Change 1); 2: Refers to variations of repeated measurements made within a sample set that are random in nature and individually not predictable. The causes of random error are assumed to be indeterminate or nonassignable. Random errors are generally assumed to be normally distributed. (5400.XY)

Rating authority

Random patrol

A patrol conducted in a manner such that the location of the patrol at any specific time cannot be predicted. (5632.1A)

Random samples

Samples obtained in such a manner that all items or members of the lot, or population, have an equal chance of being selected in the sample. (5400.XY)

Random testing

1: Unscheduled, unannounced testing and random sampling of employees in testing designated positions. (3220); 2: . . . The process will ensure that selections are not made in an arbitrary, capricious, or discriminatory manner. (3792.3)

Range

The difference between the maximum and minimum values of a set of values. (5400.XY)

Range master

The individual responsible for daily range operations; the range master ensures that the range is always safe and that only qualified firearms instructors conduct training activities. (5480.16, Change 2)

Range safety officer

The designated and specifically trained individual responsible for safety at a live firing range. (5480.16, Change 2)

Rated order or contract

Services, products, or materials, including controlled materials, which may be rated in accordance with the defense priorities and allocations system regulation. (5560.1A)

Rating

A prefix, either DO or DX, followed by an authorized program identification symbol—e.g., DO-E1, DX-E2. (5560.1A)

Rating authority

The authority delegated to DOE in the Defense Priorities and Allocations System Delegation 2, to place or authorize others to place rated contracts and orders in support of DOE programs for national defense authorized by the Director, Federal Emergency Management Agency. (5560.1A) (5700.2C)

Rational method

Rational method

As applied to drainage design, the expression of peak discharge as equal to the product of rainfall intensity, drainage area and a runoff coefficient depending on drainage basin characteristics. (6430.1A)

Raw and commercial material supplier

A manufacturer or supplier to a production agency or subcontractor of bulk material or off-the-shelf standard items to be used in the processing or manufacture of product for the DOE. The term processing, as used here, refers to material which comes in contact with weapons material during processing, but is not intended to become a part of the weapon. (QC-1, Rev. 5)

Reactor facility

Unless it is modified by words such as containment, vessel, or core, means the entire reactor facility including the housing, equipment, and associated areas devoted to the operation and maintenance of one or more reactor cores. Any apparatus that is designed or used to sustain nuclear chain reactions in a controlled manner, including critical and pulsed assemblies and research, test, and power reactors, is defined as a reactor. All assemblies designed to perform subcritical experiments which could potentially reach criticality are also to be considered reactors. Critical assemblies are special nuclear devices designed and used to sustain nuclear reactions. Critical assemblies may be subject to frequent core and lattice configuration changes, and may be used frequently as mockups of reactor configurations. Therefore, requirements for modifications do not apply unless the overall assembly room is modified, a new assembly room is proposed, or a new configuration is not covered in previous safety evaluations—i.e., safety analysis reports, safety analysis report addenda, or technical specifications. (5480.6)

Reactor operations

All those activities or functions involved in operating and using a reactor which, for purposes of this Order, begin with the initial loading of fuel in the reactor vessel and end with the removal of fuel to officially decommission or place the reactor in a standby status. (5480.6)

Reactor operator

An individual certified by contractor management to operate (manipulate the controls of) a DOE-owned reactor. (5480.6)

Real estate contact or real property specialist

Reactor projects

Those activities which contribute to siting, designing, constructing, operating, or decommissioning a reactor, and those activities involving the operation or maintenance of operable and standby reactors, including shutdown reactors containing fuel. (5480.6)

Reactor supervisor

An individual certified by contractor management to operate or to direct the operation of a DOE-owned Category B reactor. (5480.6)

Reader worker procedure and check-off

A procedure used in operations involving nuclear explosive duties under which one person reads the description of the operation to be performed, the operation is performed, and the reader checks off on a list that the operation has been performed. (5610.11)

Readout

The device that conveys information regarding the measurement being made to the user. (5400.XY)

Ready reservist

An individual liable for active duty. This category is further subdivided into two categories as follows.

- (a) **Individual ready reservist** An individual who generally does not belong to a reserve unit and does not participate in weekend or annual training. Most individuals in this category were recently released from active military service and are fulfilling the last few years of their military service obligation.
- (b) **Selected reservist** An individual who generally has a commitment to perform weekend drills with his or her reserve unit and attend annual active duty training sessions.

(3240.1)

Real estate contact or real property specialist

The person designated by the Head of the Field Element as the contact with the Director of Real Property and Facilities Management and who will answer for the appropriateness of real property actions in that organizational element. (4300.1B)

Real property

Real property

Land, improvements on the land, or both, including interests therein. The chief characteristics of real property are its immobility and tangibility. It comprises land and all things of a permanent and substantial nature affixed thereto, whether by nature or by the hand of man. By nature is meant trees, the products of the land, natural resources; by the hand of man, those objects such as buildings, fences, and bridges that are erected upon the land. All equipment or fixtures which are installed in a building in a more or less permanent manner, such as plumbing, electrical, heating, built-in cabinets, and elevators, usually are held to be part of the real estate. (5632.1A) (4330.4)

Real property inventory system

The Department of Energy's automated real property reporting system.
(6430.1A)

Real property or real estate

For purposes of this Order, are synonymous. Real estate means land and anything permanently affixed to the land such as buildings, fences, and those things attached to buildings, such as light fixtures, plumbing and heating fixtures, or other such items which would be personal property if not attached. (4300.1B)

Reasonable accommodation

Adaptations and adjustments required to make the working environment suitable and usable for a handicapped person without causing extreme hardship or expense to the employer. Such accommodations may include: modification of the worksite; removal of physical barriers; provision of aids, devices, interpreters, or assistants; modification of job tasks; changing work hours or schedules; placement in a position where a given disability constitutes less of a handicap to job placement or adapting written materials in a usable format for blind persons. (3300.2)

Reasonable suspicion

An articulable belief drawn from specific and particularized facts and reasonable inferences from those facts that an employee uses illegal drugs. Such a belief may be based upon, among other things:

- (a) observable phenomena, such as direct observation of drug use and/or the physical symptoms of being under the influence of a drug;

continued on next page

Reasonable suspicion (continued)

- (b) a pattern of abnormal conduct or erratic behavior;
- (c) arrest or conviction for a drug-related offense; or the identification of an employee as the focus of a criminal investigation into legal drug possession, use or trafficking;
- (d) information provided either by reliable and credible sources or independently corroborated;
- (e) newly discovered evidence that the employee has tampered with a previous drug test.

(3792.3) (3220)

Receiving report

The document used to formally accept goods or services provided to the Department by contract or other authorization. The completed receiving report also describes shortages, errors, and other variances from the goods or services by a government official or designee. (2200.4)

Receiving stream

Stream that receives outfall discharge of wastewater effluents. (6430.1A)

Recertification

An ongoing reassurance that a previously certified unclassified computer application processing sensitive information has been periodically reviewed, that compliance with established protection policies and procedures remains in effect, and that security risks remain at an acceptable level. (1360.2A)

Reciprocal accounts

The integrated contractor accounts that are reciprocal to the same accounts on DOE books, for example, current account (cash transactions) and investment account (noncash assets in the possession of the contractor for which the contractor is accountable to DOE). (2200.4)

Recommendation

A course of action recommended to Departmental management which is intended to correct a deficiency disclosed in an audit report.

Recommendations include questionable costs in contract audit reports. (2300.1A)

Reconciliation

Reconciliation

The verification of the validity between supporting documents and a control document. (5635.1A)

Reconciling transfer

Refers to an interoffice transaction for the transfer of fund costs between two operating activities without the actual transfer of cash. Reconciling transfers are reflected in the approved funding program of both the authorizing and performing offices. (5100.14)

Record

Any item, collection, or grouping of information about an individual that is maintained by or for the DOE including, but not limited to, education, financial transactions, medical history, criminal or employment history that contains an individual's name or other identifying number, symbol, or particulars assigned to an individual. (1800.1A)

Record material

1: Broadly defined as papers or other documentary materials, regardless of their physical form, that are made or received in the course of public business and are worth preserving temporarily or permanently. See 1324.2, page I-4 for the legal definition of records, including its applicability to contractor records. (1324.5); 2: Those classes of documentary materials which may be disposed of only after archival authority is obtained. The statutory definition of records (44 U.S.C. 3301) is "books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved, or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of the data in them. This definition applies to all Departmental records, including those created, received, and maintained by contractors pursuant to their contracts. Virtually all recorded information in the custody of the Government (including information held by contractors which is considered by contract to be government information) regardless of its media (hard copy, machine-readable, microfilm) is considered government records." (1324.2A)

Records Inventory and Disposition Schedule (RIDS)

Records

1: For purposes of Chapter V, "Freedom of Information Reading Room Procedures, "record" means books, brochures, punch cards, magnetic tapes, paper tapes, sound recordings, maps, pamphlets, photographs, microfilm, microfiche, or other documentary materials regardless of physical form or characteristics, made or received by the Department in pursuance of Federal law or in connection with Departmental functions, policies, decisions, procedures, operations, programs, or other activities in transacting public business. Record does not include: objects or articles such as tangible exhibits, models, equipment, processing materials, formulas, designs, drawings, items of value, books, magazines, pamphlets, or other reference material in formally organized and officially designated libraries of the Department, which are available under the rules of the particular library concerned. (1700.1, Change 1); 2: Defined in archival terms (44 U.S.C. 3301) as "... all books, papers, maps, photographs, machine readable materials, or other documentary materials regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference and stocks of publications and of processed documents are not included." NOTE: See DOE 1324.2, for the definition of "non-record"—not all information in electronic form consists of "record" information. (1324.6)

Records holding area

A local low-cost records storage facility, often staffed on a part-time basis, for the economical storage of noncurrent records pending their destruction or transfer to a Federal Records Center. (1324.2A)

Records Inventory and Disposition Schedule (RIDS)

The Departmental form used to both inventory records and indicate the appropriate authorized disposition and other instructions regarding their disposition. Commonly referred to as "RIDS". This purpose and contents of the form may be placed in electronic media as long as all requirements of the form are met. (1324.11) (1324.2A)

Records management

Records management

1: The planning, controlling, directing, organizing training, promoting and other managerial activities involved with respect to records creation, records maintenance and use, and records disposition. (1324.2A); 2: The planning, budgeting, organizing, directing, training, and control involved in managing the life cycle of records. This life cycle encompasses the interrelated and interdependent phases of records creation or collection, records maintenance and use, and records disposition. (1324.5)

Records management program elements and activities

Formal program elements and activities that focus on the management and operation of discrete portions of the records life cycle, such as a records disposition management program element or records storage and retrieval activities carried out within the framework of a records disposition management program element. (1324.5)

Records management technologies

Hardware and software tools that can serve as aids to the effective and efficient management of records. Examples include the technologies of micrographics, word processing, automatic data processing, reprographics, facsimile, optical character recognition, electronic mail, and computer assisted retrieval. (1324.5)

Records (official files)

1: (a) Records are defined in 44 United States Codes, Section 3301, "Disposal of Records-Definition of records," as including "... all books, papers, maps, photographs, or other documentary materials, regardless of physical form or characteristics, made or received by the Department of Energy in pursuance of Federal law or in connection with the transaction of public business, and preserved or appropriate for preservation by the Department as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of the data contained therein. (b) Nonrecord is defined in DOE 1324.2, of 5-28-80, page I-3, paragraph 20. Twenty examples of nonrecord material are provided in that paragraph. (c) The Privacy Act defines a "record," as meaning any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, his education, financial transactions, medical history, and criminal or employment history and that contains his name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a finger or voice print or photograph. (1324.3); 2: Records document the results of work. They/Records may be a paper copy, a laboratory notebook, a photograph, a microfilm, a radiographic film, an electronic medium or an optical medium. (QC-1, Rev. 5) (QC-2)

Records schedules

These are the means by which the disposition standards for records are published. The General Records Schedules, issued by NARA, includes records relating to civilian personnel, fiscal functions, accounting, procurement, communications, printing, and common or housekeeping functions, and certain nontextual records. The Department of Energy Records Schedules, issued by the Department, pertain to unique records not covered by the GRS, for which the Department has obtained NARA approval for their disposition. It is estimated that the GRS covers about one third of the records of the Department. The Department is responsible for preparing and revising separate schedules for all the records the GRS does not cover. (1324.2A)

Recoupment

A reduction in the amount otherwise payable by the Department on a contract by the amount of questionable costs disallowed, thereby effectively recovering the amount disallowed although no funds are received. Recoupment may be effected against amounts claimed by the contractor on the same contract under which the debt arose. (2300.1A)

Recovered cost

The amount of questionable cost determined to be disallowed by a contracting officer and subsequently recovered by the Department. (2300.1A)

Red/black concept

The concept that electrical and electronic circuits, components, equipment, and systems which handle classified plain language information in electric signal form (RED) must be separated from those which handle encrypted or unclassified information (BLACK). Under this concept, RED and BLACK terminology is used to clarify specific criteria relating to, and to differentiate between, such circuits, components, equipment, and systems and the areas in which they are contained. (5300.4B)

Reference man

Means a hypothetical aggregation of human (male and female) physical and physiological characteristics arrived at by international consensus (ICRP Publication 23). These characteristics may be used by researchers and public health workers to standardize results of experiments and to relate biological insult from ionizing radiation to a common base. The "reference man" is assumed to inhale 8400 cubic meters (m³) of air in a year and to ingest 730 liters (L) of water in a year. (5400.5, Change 1) (5400.XX) (5400.XY)

References

References

Any approved document to which a rater and/or inspected facility's personnel may refer in determining the standards against which a security system is being measured. (5632.1A)

Reference source

A source (e.g. a radioactive source) not necessarily calibrated that is used to confirm the continuing satisfactory operation of an instrument. (5400.XY)

Reference standards

Those guides or standards of this Order adopted by DOE that DOE and its contractors should consider for guidance, as applicable, in addition to the mandatory standards. (5480.4, Change 1)

Refractories

Refractories include nonmetallic materials having those chemical and physical properties that make them applicable for structures, or as components of systems, that are exposed to environments above 1,000°F. (6430.1A)

Refunds

Recoveries of excess payments that are credited to an appropriation or fund account. These items, such as the recovery of a salary overpayment or the return of the unused portion of a travel advance, are not included as reimbursements but are treated as reductions of outlays. Refunds also include credits to an appropriation of fund account that result from accounting adjustments relating to obligations or outlays where such procedures are permitted by law or regulations. (2200.4)

Regional Coordinating Office

Operations Offices located at Oak Ridge, Savannah River, Albuquerque, Chicago, Idaho, Richland, and San Francisco who provide radiological assistance coordination, national contingency planning, and regional preparedness committee coordination. (5500.1A, Change 1)

Regional frequency analysis

An analysis that addresses the probability of the occurrence of two or more random hydrologic events. (6430.1A)

Reimbursable procurement

Regional Response Team

A regional mechanism for planning and preparedness activities for response actions under the National Contingency Plan. Except when a regional response team is activated for a removal incident, representatives of the Environmental Protection Agency and the U.S. Coast Guard act as co-chair. For such activation, the chairman shall be the Environmental Protection Agency or U.S. Coast Guard representative, based on whether the discharge or release occurs in the inland zone or coastal zone, unless otherwise agreed upon by the co-chair. (5500.1A, Change 1)

Regional teams

The National COG teams are supported by both Regional crisis management teams as well as Regional Emergency Management Teams (REMTS). The crisis management teams, which are located at each of the DOE Operations Offices and Power Marketing Administration Offices, are responsible for maintaining essential operations, as prescribed in EO 12656, at their sites and for shutting down all other operations. The REMTS, which would be activated if the peacetime situation crisis worsened, would be relocated to an emergency operating facility. (5500.9)

Regulatory audit

Audits that result in fines or penalties, assessments or price adjustments, or other monetary recoveries. (2300.1A)

Rehabilitation

A formalized treatment process aimed at the resolution of behavioral-medical problems, including alcoholism, drug abuse, and mental health disorders. (3792.3) (3220)

Reimbursable authority

Reimbursable obligation authority can only be acquired by obtaining an allotment through the DOE approved funding program process. (2200.4)

Reimbursable procurement

Procurement for a customer citing DOE funds on the contract or purchase order, with reimbursement by the customer. (2200.4)

Reimbursable work

Reimbursable work

Work or services performed for a sponsor that are part of the sponsor's mission and for which the Department does not directly receive appropriated funds from Congress. In other words, the work or services performed are financed not by DOE appropriations, but rather by the funds of the ordering Federal agency or by cash advances from a non-Federal sponsor. (2200.4)

Reimbursements

1: The sums received by the Government for commodities sold or services furnished either to the public or to another Government account that are authorized by law to be credited directly to a specific appropriation or fund account. These amounts are deducted from the total obligations incurred (and outlays) in determining net obligations (and outlays) for such accounts. (5100.14); 2: Amounts received from the public or other Government agencies that represent payments for goods and services furnished and that may be credited or authorized by law to the appropriation or fund account of the providing entity. An anticipated reimbursement is an estimated transaction that is neither earned nor collected, as in the case of transactions with the public, or for which there has been no order accepted, as in the case of transactions within the Government. (2200.4)

Reimbursements collected

See Reimbursements. (2200.4)

Reimbursements earned

The amount of reimbursements to be collected, based on commodities, work, services actually furnished (delivered), whether or not billed. (2200.4)

Reinforcement ratio

The percentage of tension reinforcement in a reinforced concrete beam. (6430.1A)

Reinstated cost

The amount of questionable cost determined to be allowable by a contracting officer and therefore payable by the Department. (2300.1A)

Related ADP equipment

Any ADP equipment which will be justified, at the time of acquisition, primarily on the basis of FMS requirements or applications. (2200.12)

Related personal property

- 1: Any personal property which is a integral part of real property or is related to, designed for, or specially adapted to the functional or productive capacity of the real property and (whose) removal of this personal property would significantly diminish the economic value of the real property. (4300.1B);
- 2: . . . Normally, common use items, including but not limited to general-purpose furniture, utensils, office machines, office supplies, or general purpose vehicles, are not considered to be related personal property. (4300.4)

Relative

An individual who is related to a public official as father, mother, son, daughter, brother, sister, uncle, aunt, grandfather, grandmother, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half-brother, or half-sister. (3308.1)

Relative error

An error expressed as a percentage of the true value or accepted reference value. (5400.XY)

Relative incapacitation index

An index of the performance of commercially available ammunition and weapons as it concerns the effectiveness of the cartridge to incapacitate. (5632.1A)

Release of property

As used in this Order, means the exercising of DOE's authority to release property from its control after confirming that residual radioactive material (over which DOE has authority) on the property has been determined to meet the guidelines for residual radioactive material in Chapter IV or any other applicable radiological requirements. There may be instances in which DOE or other authority will impose restrictions on the management and/or use of the property if the residual radioactive material guidelines of Chapter IV are not met or if other applicable Federal, State, or local requirements cause the imposition of such restrictions. (5400.5, Change 1)

Reliability

The capability of a system to perform a required function under stated conditions for a stated period of time. (5400.XY)

Reliability-Centered Maintenance (RCM)

Reliability-Centered Maintenance (RCM)

A unique tool used by reliability, safety, and/or maintenance engineers for developing optimum maintenance plans which define requirements and tasks to be performed in achieving, restoring, or maintaining the operational capability of a system or equipment. Implementing the RCM process requires the application of a decision logic that enables systematic analysis of failure mode, rate, and criticality data to determine the most effective maintenance requirements for maintenance-important items. (5480.MAINT)

Rem

A unit of dose equivalent that is the product of absorbed dose (D) in rads in tissue, a quality factor (Q), and other modifying factors (N). Derived from roentgen equivalent man. (6430.1A)

Remedial action

1: Those actions consistent with permanent remedy taken instead of, or in addition to, removal action in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. (5400.5, Change 1); 2: Activities conducted at DOE facilities to reduce potential risks to people and/or harm to the environment from radioactive and/or hazardous substance contamination. (5820.2A)

Remote-handled transuranic waste

Packaged transuranic waste whose external surface dose rate exceeds 200 mrem per hour. Test specimens of fissionable material irradiated for research and development purposes only and not for the production of power or plutonium may be classified as remote-handled transuranic waste. (5820.2A)

Remote interrogation points

Locations for receiving information (e.g., printouts) transmitted by automatic data processing centers. Locations for receiving information, such as printouts, transmitted by automatic data processing centers. (5632.1A) (6430.1A)

Remuneration

Compensation paid or payable to an employee for personal services, whether such compensation is denominated as wages, salary, commission, bonus pay, or otherwise, and is included in but not limited to those items set forth in 5 CFR 581.103. (2200.11)

Reportable occurrence

Repair

The replacement or restoration of a deteriorated component of property such that it can be used for a designated purpose. (4300.4)

Repeatability

The degree to which identical results can be obtained from the analysis of identical samples. (5400.XY)

Replica

A copy of the official seal displaying the identical form, content, and colors thereof. (1000.2)

Replicability

The precision, usually expressed as a standard deviation, measuring the variability among replicates. (5400.XY)

Replicates

Repeated but independent determinations of the same sample. (5400.XY)

Reportable

An unplanned event that is designated as requiring, at a minimum, a Critique Report as described in Attachment 1. (RF 5000.3, Rev. 1)

Reportable insecurities

All deviations from rules of COMSEC (both cryptographic, personnel and physical) or any occurrence which may detrimentally affect the security of COMSEC information or encrypted communications. Occurrences that require reports are listed in National Security Agency COMSEC publications and in specific operating instructions and maintenance manuals. (5300.3B)

Reportable nuclear material alarm

An alarm resulting from critical loss detection elements which are not resolved within a specified time period. (5633.3, Change 1)

Reportable occurrence

1: Events or conditions to be reported in accordance with the criteria defined in this Order. (5000.3A); 2: Included are emergencies, unusual occurrences, and off-normal occurrences. (5633.3, Change 1)

Reporting Identification symbol

Reporting identification symbol

1: A unique combination of three or four letters that are assigned to each reporting organization by the Office of Safeguards and Security or the Nuclear Regulatory Commission for purposes of identification in the nuclear materials management data base. (5633.3, Change 1); 2: Unique combinations of three and four letters which are assigned to each nuclear facility for purposes of reporting to the Nuclear Materials Management and Safeguards System. Information relating to the construction and interpretation of reporting identification symbols is contained in the "Directory of Reporting Identification Symbols for DOE." (5633.4); 3: Unique combinations of three or four letters which are assigned to each reporting facility for the purpose of identification in the nuclear materials management data base. Information relating to the construction and interpretation of reporting identification symbols is contained in the "Directory of Reporting Identification Symbols" available from DP-34. (5633.5); 4: Unique combinations of three or four letters which are assigned to each reporting facility for the purpose of identification in the nuclear materials management data base. Information relating to the construction and interpretation of reporting identification symbols is contained in the "Directory of Reporting Identification Symbols" available from DP-34. (5660.1)

Repository

A facility for the permanent deep geologic disposal of high level or transuranic waste. (5820.2A)

Representative of employees

A person chosen by contractor employees to represent their occupational safety and health related views, interests, and concerns. For purposes of access to an employee's bioassay, monitoring, or radiation exposure records, if the representative is not a recognized/certified collective bargaining agent, then he or she must have the employee's written authorization for such access. (5483.1A)

Representative sample

A sample taken to depict the characteristics of a lot or population as accurately and precisely as possible. A representative sample may be a "random sample" or a "stratified sample" depending upon the objective of the sampling and the characteristics of the conceptual population. (5400.XY)

Reprimand

A formal disciplinary action notice issued to an employee by a management official or supervisor having disciplinary authority with respect to that employee. (3750.1, Change 3)

Reprogramming

Reproducibility

The degree of precision of a laboratory (repeatedly) and/or of different laboratories obtaining the same measurement values of the same sample. (5400.XY)

Reproduction

A copy of the official seal displaying the form and content thereof, reproduced in only one color. (1000.2)

Reprogramming

1: The utilization of funds in an appropriation account for purposes other than those contemplated by the Congress during appropriation action.

Reprogramming differs from the appropriation transfer, which is prohibited unless specifically authorized by statute. Reprogramming actions result where there is:

- (a) any departure from a program baseline as described in the Departmental base table and amplified in Congressional reports (House, Senate or Conference) accompanying authorization and appropriation acts; or
- (b) to the extent not covered in (a) above, any significant programmatic departure from that described in Congressional budget narrative justifications (as approved by OMB and Congress) and Congressional testimony (including questions and answers submitted for the hearing record). These departures may be identified as:
 - (1) the reallocation of funds from one activity, program, function, etc., to another within an appropriation. Most of these actions normally result in base table changes; however, there may be changes that qualify as reprogramming actions but do not result in base table changes;
 - (2) the use of funds for purposes other than those presented to and approved by Congress, such as a new start within a generic line or a significant change in scope;
 - (3) the adjustment of activities involving areas of known Congressional special interests, concerns, or sensitivities.

(5100.14);

continued on next page

Reprogramming

Reprogramming (continued)

2: . . . NOTE: With regard to changes within base table controls, it is impractical to delineate for each of the Department's varied projects and activities all circumstances or events which constitute reprogramming. Each action is unique, requiring evaluation and judgment on a case-by-case basis with due consideration given to the specific circumstances and Congressional interests prevailing at that time. To this end, page 6, paragraph 9, contains representative examples of factors and events which should be considered when applying judgment in those instances where a possible reprogramming action exists. (5160.1A); 3: A reprogramming is the reallocation of funds from one budget activity, program, or function to another within an appropriation; any departure from a program as described in the Department's Congressional budget justification; or, any use of funds for purposes different than that outlined by Congress in the appropriation or committee reports. (5100.12); 4: Utilization of funds in an appropriation account for purpose other than those contemplated at the time of appropriation. Reprogramming generally is accomplished pursuant to consultation between DOE, the Office of Management and Budget, and the appropriate congressional committees. (2200.4)

Request

A written inquiry by an individual (or that individual's parent, legal guardian or authorized legal representative to review) for any record which is in a particular system of records which pertains to that individual. (1800.1A)

Request for access

A written inquiry by an individual (or that individual's parent, legal guardian or authorized legal representative to review) for any record which is in a particular system of records which pertains to that individual. (1800.1A)

Request for correction or amendment

A written request by an individual, parent, or legal guardian or representative that the DOE change, amend, or correct a record which the individual believes is inaccurate, unnecessary, irrelevant, untimely or incomplete. (1800.1A)

Required strength

Required strength to resist factored loads or related internal moments and forces. (6430.1A)

Response Options Paper (ROP)

Rescission

1: Enacted legislation canceling budget authority, previously provided by Congress, prior to the time when the authority would otherwise lapse and no longer be available for obligation. Budget authority which is proposed for rescission is not available for obligation or for reprogramming purposes. (5100.13); 2: The consequence of enacted legislation canceling budget authority previously provided by Congress prior to the time the authority would lapse. (2100.4A)

Research

A systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute "research" for purposes of this Order, whether or not they are conducted under a program which is considered research for other purposes. For example, some "demonstration" and "service" programs may include research activities. (1300.3)

Research and development report

See Scientific and technical report. (5635.1A)

Research computer

A computer acquired and used predominantly for research into hardware and software technology advancements and not used for processing production jobs. (1360.1A)

Reservoir routing

A technique used in hydrology to compute the effect of reservoir inflow on reservoir outflow. (6430.1A)

Residual radioactive material

Means any radioactive material which is in or on soil, air, equipment, or structures as a consequence of past operations or activities. (5400.5, Change 1)

Response Options Paper (ROP)

A formal recommendation(s) to the Secretary of Energy containing courses of action to respond to energy emergency conditions. The ROP includes specific recommendations for implementing response measures together with assessments of likely impacts and constraints. (5500.8) (6430.1A)

Response time

Response time

1: This term, when used to specify performance of a rapid action deluge fire protection system, represents the elapsed time between the initiation of the incident and water application to the material being protected. (6430.1A) (1800.10); 2: The time interval between when the detector senses a charged particle (e.g., β , Ω) or photon (e.g., τ , X-ray) and when the signal is registered by the measurement system's data storage device. (5400.XY)

Responsible contracting officer

The Departmental official with direct responsibility for administering the contract for the operation of a DOE research or production facility. This person is usually the Head of a Field Element. (4300.2A, Change 2)

Responsible Organization

The DOE organization responsible for implementation and oversight of Safeguards and Security requirements at a DOE facility, including approval of security plans and resolution of deficiencies other than those which are specific to another DOE organization's security interests. If there is more than one DOE organization with security interests at a facility, the organization which is responsible for the programs involving the highest level of security interest is normally the responsible office. However, this responsibility may, by mutual agreement of the offices involved, be accepted by an office which does not have the highest level of security interest but a greater scope interest, as with a long term or traditional interest. When more than two offices have interests at the same facility and when there is no overriding or traditional interest the organization assigned geographic responsibility in Attachment 111-1 of this Order should be assigned as the responsible organization. (5634.1A)

Responsible security office

The DOE security office that is responsible for security at a Headquarters or field organization building or for granting security approval of a DOE classified facility. (5631.1A)

Restoration

The act of restoring the land to the condition in which it was received, less normal wear and tear. (4300.1B)

Restricted Data

1: As defined in the Atomic Energy Act of 1954, includes all data concerning: (a) the design, manufacture, or utilization of atomic weapons; (b) the production of Special Nuclear Material; and/or (c) the use of Special Nuclear material in the production of energy; but does not include data declassified or removed from the Restricted Data category pursuant to section 142 of the Atomic Energy Act of 1954. (1270.2A); 2: A category of information classified under section 142 and defined in section 11 (y) of the Atomic Energy Act and is explained in DOE 5650.2A. (5650.3, Change 1); 3: Data which is defined in section 11(y) of the Atomic Energy Act of 1954, as amended, as "all data concerning: (a) design, manufacture, or utilization of atomic weapons; (b) production of special nuclear material; or (c) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category pursuant to section 142." (5631.4) (5631.2B) (5610.2); 4: All data concerning: design, manufacture, or utilization of atomic weapons; production of Special Nuclear Material; or use of Special Nuclear Material in the production of energy. It does not include data declassified or removed from the Restricted Data category, pursuant to section 142 of the Atomic Energy Act of 1954, as amended. (5632.1A); (5635.1A); 5: All data concerning the following, but not including data declassified or removed from the RD category pursuant to section 142 of the Atomic Energy Act: (a) design, manufacture, or utilization of atomic weapons; (b) production of Special Nuclear Material in the production of energy; and (c) use of Special Nuclear Material in the production of energy. (5670.2)

Restricted material

Any raw, in process, or manufactured commodity, equipment, component, accessory, part, assembly, or product concerning design, manufacture, or utilization of atomic weapons, protection of Special Nuclear Material, or use of Special Nuclear Material in the production of energy. (5632.1A)

Restructuring

An action that involves using the funds as originally intended in the Department's Congressional budget justification, but reporting the funds differently from the form and detail in which the funds were proposed by the President and appropriated by the Congress. Any format change to the DOE base table constitutes a restructuring action and requires that OMB and Congress be notified. (5100.12) (5160.1A)

Retaining wall**Retaining wall**

A wall designed to maintain differences in ground elevations by holding back a bank of material. (6430.1A)

Retrocession

The act of reverting back to a State the U.S. Government's legislative jurisdiction over property. (4300.1B)

Return period

The average number of years within which a given hydrologic event will be equaled or exceeded. (6430.1A)

Revenues

Inflows or other enhancements of assets of the Department or settlement of its liabilities (or a combination of both) resulting from delivering or producing goods, rendering services, or other activities that constitute the Department's mission-related work for which funds have been appropriated. (2200.4)

Review director

Appointed by the Office of Project and Facilities Management, serves as the technical advisor to a review team and is responsible for assuring that the review of the contractor's systems is consistent with policy for criteria use and application. Typical activities include assisting in overall review planning and review team selection; interpreting the criteria, policy, and requirements; evaluating contractor earned value techniques; and consulting on review report preparation. (2250.1C)

Reviewing official

1: An individual who may make a determination based on the procedures on page 14, paragraph 10 (b), that a document or material contains, does not contain, or no longer contains UCNI. (5650.3, Change 1); 2: An individual who may make a determination that a document or material contains, does not contain, or no longer contains UCNI. (5635.4)

Review team

A group of representatives from the project office, field organization, Office of Project and Facilities Management, and others, as appropriate, which evaluates a contractor's management control systems. Each member is assigned specific review responsibilities. (2250.1C)

Rights and interest records

Revised payments

Proposed changes in payments that are based on a reclassification of the land to a new tax category, an increase or decrease in the amount of the land used to compute the payment, or other major changes in the method of computing the payments. Changes in the amounts to be paid that are based on jurisdiction wide adjustments to tax assessments or tax rates are not considered to be revised payments. (2100.12)

Revision

A revision to a Site Development Plan or reissuance of the complete Site Development Plan with new information incorporated, and any old information that remains in the plan verified for accuracy and currentness. (4300.1B)

Revolving fund

A fund established to finance a cycle of operations through amounts received by the fund. There are three types of revolving funds: public enterprise, intragovernmental revolving, and trust revolving funds. (2200.4)

Rifle

A firearm fired from the shoulder, as distinct from artillery and pistols. (5480.16, Change 2)

Right of entry

The temporary right to enter upon property for a specified purpose without acquiring any real property or interest therein. (4300.1B)

Rights and interest records

Records essential to the preservation of the legal rights and interests of individual citizens and their government. These records require protection, but storage points do not have to be at or in the vicinity of Emergency Operation Centers. Examples of rights and interest records are:

- (a) **Legal rights records** Records maintained by the Federal Government as the statutory office of records, citizenship records, employee payroll and leave record, retirement records, and insurance records.
- (b) **Fiscal Records** Periodic summaries of financial status and records of significant amounts of money owed the Department or contractors.

(5500.7A)

Risk

Risk

1: A quantitative or qualitative expression of possible loss which considers both the probability that a hazard will cause harm and the consequences of that event. (5480.5) (5480.6) (5481.1B, Change 1); 2: The hazard or change for loss. (3890.1); 3: An existing characteristic that carries a probability of waste, loss, mismanagement, unauthorized use, or misappropriation due to the nature of an activity itself (e.g., payment of entitlements, handling sensitive or valuable material, and sales to the public). Major risks are identified in the vulnerability assessment process. Detailed risks are identified in the abbreviated internal control review and the internal control review processes. (1000.3B)

Risk assessment

1: A management tool which provides a systematic approach for determining the relative value and sensitivity of computer installation assets, assessing vulnerabilities, assessing loss expectancy or perceived risk exposure levels, assessing existing protection features and additional protection alternatives or acceptance of risk, and documenting management decisions. Decisions for implementing additional protection features are normally based on the existence of a reasonable ratio between cost/benefit of the safeguard and sensitivity/value of the assets to be protected. Risk assessments may vary from an informal review of a small scale microcomputer installation to a more formal and fully documented analysis (i.e., risk analysis) of a large scale computer installation. Risk assessment methodologies may vary from qualitative or quantitative approaches to any combination of these two approaches. (1360.2A); 2: An identification of a specific ADP Facility's assets, the threats to these assets, and the ADP Facility's vulnerability to those threats. (5637.1)

Risk assumption

Includes losses that are treated as an expense, when they occur, without advance funding. (3890.1)

Road test examiner

A person selected to conduct road tests. This person should have driver training and/or motor vehicle management responsibilities. (3791.2A)

Rolling

Entering and leaving the zone of detection prone to the ground, parallel to the zone of detection, and rotating one's body about its long axis at an approximate velocity of 0.1 meter per second while maintaining a low profile. (5632.1A)

Running

Roll-up

The accumulation, within a single event, of Category I quantities of SNM from Category II quantity locations within the same protected area. (5630.13)

Routine use

The disclosure of a record compatible with the purpose for which it was collected. (1800.1A)

Routine waste

Waste generated due to normal operation and anticipated abnormal events. (6430.1A)

Ruggedness testing

A special series of tests performed to determine the sensitivity of a measurement system to variations of certain factors suspected of affecting the measurement system. (5400.XY)

Rule

The whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy, or describing the organization, procedure, or practice requirements of an agency. This includes the approval or prescription for the future of rates, wages, corporate or financial structures or reorganizations thereof, prices, facilities, appliances, services or allowances therefor, or of valuations, costs, or accounting, or practices bearing on any of the foregoing. ("Rule" and "Regulation" have the same meaning.) (1900.1D) (1900.2B)

Rule making

An agency process for formulating, amending, or repealing a rule. (1900.1D) (1900.2B)

Running

Entering and leaving the zone of detection at an approximate velocity of 5 meters per second. (5632.1A)

DOE ORDER DEFINITIONS

S

Sabotage

- (a) **Industrial** Any deliberate act which is directed against a facility, property, component, or procedure and intended to cause damage, obstruct productivity, or interrupt normal functions.
- (b) **Radiological** Any deliberate act directed against an SNM facility, an SNM or weapon security shipment, or a component of such facility or shipment which could directly or indirectly endanger the public health and safety by exposure to radiation.

(5630.13) (5632.1A)

Safeguards

1: An integrated system of physical protection, personnel reliability, accountability, and material control measures designed to deter, prevent, detect, and respond to unauthorized access, diversion, or possession of a nuclear weapon, a component of a nuclear weapon, or nuclear materials. (5650.3, Change 1); 2: An integrated system of physical protection, material accounting, and material control measures designed to deter, prevent, detect, and respond to unauthorized possession, use, or sabotage of special nuclear materials. In practice, safeguards involve the development and application of techniques and procedures dealing with the establishment and continued maintenance of a system of activities including physical protection, quantitative knowledge of the location and use of special nuclear materials, and administrative controls and surveillance to assure that procedures and techniques of the system are effective and are being carried out. Safeguards include the timely indication of possible diversion or credible assurances by audits and inventory verification that no diversion has occurred. (5632.1A) (6430.1A); 3: An integrated system of physical protection, material accounting, and material control measures designed to deter, prevent, detect, and respond to unauthorized possession, use or sabotage, of SNM. Safeguards include the timely indication of possible diversion, and credible assurance that no diversion has occurred. (5633.3, Change 1);

continued on next page

Safeguards

Safeguards (continued)

4: Those measures applied, pursuant to the agreement and protocol, to enable the IAEA to detect possible diversion of nuclear material. (1270.2A);

5: A collective term that comprises those measures designed to guard against malevolent acts involving material such as source or special nuclear material. Safeguards includes providing timely or delayed indication of possible malevolent acts or credible assurance that the malevolent acts have not occurred. The measures may include, but are not limited to:

- (a) the maintenance and verification of records of receipt, shipments, and periodic inventories;
- (b) physical protection;
- (c) personnel security;
- (d) inspection of nuclear facilities to provide assurance that malevolent acts have not occurred;
- (e) physical methods to detect or measure loss of materials; or
- (f) federal statutes.

(5634.1A)

Safeguards agreement working group

A team established by the Interagency Steering Group for International Safeguards to monitor implementation of the agreement. (1270.2A)

Safeguards and security interest

Any of the following that may require: special protection, classified matter, SNM, and associated facilities; security shipments, critical facilities, secure communications centers; Sensitive Compartmented Information Facilities; processing centers, or other systems that include classified information or Departmental property. (5634.1A)

Safeguards and security survey

The security survey and/or nuclear materials survey, as appropriate. The security survey and nuclear materials survey may be performed independently or as one integrated survey. Integrated safeguards and security survey refers to the combined security and nuclear material survey. (5634.1A)

Safety Analysis Report (SAR)

Safe mass

That mass of fissionable materials which is subcritical for all conditions to which it could reasonably be expected to be exposed, including processing, handling, storing, and procedural uncertainties. (5480.5)

Safe-Secure Railcar (SSR)

A specially designed railcar that has protective and deterrent systems and is used in a special train to transport nuclear explosives or special nuclear material. (5610.11)

Safe-Secure Trailer (SST)

A specially designed semi-trailer that has protective and deterrent systems that is used with a special tractor to transport nuclear explosives or special nuclear material. (5610.11)

Safe shutdown earthquake

See Design basis earthquake. (6430.1A)

Safety analysis

A documented process to systematically identify the hazards of a DOE operation; to describe and analyze the adequacy of the measures taken to eliminate, control, or mitigate identified hazards; and to analyze and evaluate potential accidents and their associated risks. (5480.5) (5481.1B, Change 1)

Safety Analysis Report (SAR)

1: A report, prepared in accordance with DOE 5481.1B, that summarizes the hazards associated with the operation of a particular facility and defines minimum safety requirements. A Safety Analysis Report is designated as final when it is based on final design information. Otherwise, it is designated as preliminary. (6430.1A); 2: A safety document providing a concise but complete description and safety evaluation of the site, the design, normal and emergency operation, potential accidents, and predicted consequences of such accidents, and the means proposed to prevent such accidents or mitigate the consequences of such accidents. A Safety Analysis Report is designated as final when it is based on final design information. Otherwise, it is designated as preliminary. (5480.6); 3: Prepared in accordance with DOE 5481.1B; the report summarizes the hazards associated with the operation of a particular facility and defines minimum safety requirements. (5480.16, Change 2)

Safety Analysis Report for packaging

Safety Analysis Report for packaging

1: A document that provides a comprehensive technical evaluation and review of the design, testing, operational procedures, maintenance procedures, and quality assurance program to demonstrate compliance with the NRC regulatory safety standards, or equivalent standards established by the DOE for approving packaging and issuing certificates of compliance. (1540.2, Change 1); 2: A document that provides a comprehensive technical evaluation and review of the design, testing, operational and maintenance procedures of a particular package. (5480.3A)

Safety and Health director

The primary field organization staff manager responsible for the overview and coordination of the occupational safety and health program administered by a field organization for its contractor operations. (5483.1A)

Safety class

Three levels that are assigned to items (components, systems or structures) that must be designed to provide specific functions to protect operators, the public, or the environment. These levels are as follows:

SC-1: Provides function and/or structural integrity for mitigation of event severities up to and including DBAs;

SC-2: Provides function and/or structural integrity for mitigation of event severities up to and including OBAs;

SC-3: Provides function and/or structural integrity for mitigation of event severities up to and including UBC and those that are industrial safety related.

Further description is contained in Section 1300-3.2, safety class items. (6430.1A)

Safety class items

Systems, components and structures, including portions of process systems, whose failure could adversely affect the environment or safety and health of the public. Determination of classification is based on analysis of the potential abnormal and accidental scenario consequences as presented in the SAR as required by 5481.1B. (6430.1A)

Safety concern

A declaration, statement or assertion of impropriety or inadequacy associated with the safety of DOE-managed and contractor-managed activities, the validity of which has not been established. (5000.XYZ)

Safety document

A document prepared specifically to assure that the safety aspects of part or all of the activities conducted at a reactor are formally and thoroughly analyzed, evaluated, and recorded—e.g., Technical Specifications, Safety Analysis Reports and addenda, and documented reports of special safety reviews and studies. (5480.6)

Safety guides

Documents designated or recognized as an acceptable basis for nuclear criticality safety evaluations. These guides may be used as aids by DOE field organizations in establishing acceptable safety practices, and include material developed by DOE contractors, professional societies, industrial organizations, and foreign atomic energy industries. These guides are listed in paragraph 14. (5480.5)

Safety limit

A limit on an important process variable that is necessary to provide reasonable protection to the integrity of certain physical barriers that guard against the uncontrolled release of radioactivity or an accidental criticality. (6430.1A)

Safety review

A deliberate and critical examination of the safety impact of a proposed activity or an ongoing activity during the siting, designing, constructing, operating, maintaining, modifying, or decommissioning of a reactor, which could affect health and safety. Documentation of the safety review serves to provide management with adequate identification of the safety issues and their possible implications, and also to allow others not directly involved in the program or review process to independently evaluate the completeness or adequacy of the review. (5480.6)

Salary offset

An administrative offset to collect a debt under title 5, section 5514, of the United States Code by deduction(s) at one or more officially established pay intervals from the current pay account of an employee with or without his or her consent. (2200.4) (2200.2A)

Salvage value**Salvage value**

An estimate of the amount that will be realized at the end of the useful life of a depreciable asset from the disposition of the asset as used property or scrap less cost disposition. (2200.4)

Sample

Has two definitions: (a) a subset or group of objects selected from a larger set, called the "lot" or "population"; and (b) extracted portion or subset of an effluent stream or environmental media. (5400.XY)

Sample blank

See Blank. (5400.XY)

Sampling

The extraction of a prescribed portion of an effluent stream or of an environmental medium for purposes of inspection and/or analysis. (5400.XY)

Sanitary engineering structures

Tanks, reservoirs, and other structures commonly used in water and waste treatment works, where dense, impermeable concrete with high resistance to chemical attack is required. (6430.1A)

Sanitary landfill

A system for disposal of garbage, trash, and other rubbish from domestic sources in compacted layers covered with soil to a depth sufficient to exclude rats, flies, and other vectors. Most sites provide for leachate control. (6430.1A)

Sanitization

The elimination of classified information from an ADP system or media associated with an ADP system to permit the reuse of the ADP system or media at a lower classification level or to permit the release to uncleared personnel or personnel without the proper information access authorizations. (5637.1)

Sanitizing

Physical removal of all classified information from a classified document. (5635.1A)

Saturated zone

That region below the ground surface where the groundwater is above atmospheric pressure. (6430.1A)

Scientific and technical information

Scheduled Airlines Traffic Office (SATO)

A travel office staffed by scheduled airlines personnel that provides reservations, ticketing, and related travel management services for official government travelers. (1500.4)

Scientific and technical computer software

Those unclassified computer programs, routines, and supporting material with scientific, technical, and energy-related applications. This includes independent subroutines, related groups of routines, single programs, and sets or systems of programs. (1360.4A)

Scientific and technical conference

A meeting or symposium for consultation, discussion or exchange of ideas, data, or other information of a scientific or technical nature. This includes meetings funded, in part or fully, using Departmental funds and meetings within scope of DOE research or development interests. (1430.1A)

Scientific and technical information

1: Information derived from basic or applied research, development, engineering, technological demonstration, economic and social research, or scientific inquiry into phenomena or technology application. It is recorded, spoken, or represented in any medium for storage or communication and may be contained in computer software with scientific and technical applications. (1430.3); 2: Scientific and technical information includes knowledge or information (unlimited, limited, controlled, and classified) that results from or pertains to scientific and technical information first used, cumulated, or developed during work supported by DOE or during work carried out for others at DOE-supported facilities. This information reports on research, development, or demonstration and is contained in technical reports, journal articles, reprints, theses or dissertations, scientific/technical conference and symposium proceedings, translations, engineering drawings, computer software with scientific and technical applications, and some machine readable data bases. This information, which is the basic intellectual resource of and results from the Department's scientific and technological efforts, is used by managers, scientists, researchers, and engineers engaged in such efforts. Experimental data, theoretical data, analytical studies, and economic or other social science research and energy use projections may be among other types of information products considered as scientific and technical information. (1430.1A)

Scientific and technical information functions

Scientific and technical information functions

The processes involved in recording and transferring scientific and technical information from its generator or source to the ultimate user or beneficiary. These processes include a broad spectrum of activities, including generation, publication, distribution, storage to access, assimilation, and use of scientific and technical information products. (1430.1A)

Scientific and technical reports

1: Those reports which contain scientific and technical information first used, cumulated, or developed during work supported by DOE or carried out for others at DOE facilities which must be reported promptly and fully to the Department's Technical Information Center as required under policy established in DOE 1430.1A. (5650.3, Change 1); 2: For the purpose of this Order, scientific and technical reports are documents that contain results from or pertain to scientific and technical information first used, cumulated, or developed during work supported by DOE or during work carried out for others at DOE facilities. These documents report on research, development, or demonstration and take the form of technical reports (formal, topical, or progress), journal articles, reprints, theses or dissertations, scientific or technical conference and symposium proceedings, or translations. (5635.1A)

Scrap

1: The economically recoverable by-products of source materials or special nuclear materials which are generated during chemical and mechanical processing, or economically recoverable fragments or portions of any nuclear materials which may require one or more forms of chemical or physical treatment before it can be used as feed to a refinery or to a production of fuel fabrication process. Scrap is unsuitable for use as a finished product. (5632.1A); 2: The various forms of nuclear material(s) generated during chemical and mechanical processing, other than recycle material and normal process intermediates, which are unsuitable for continued processing, but all or part of which will be converted to usable material by appropriate recovery operations. See DOE 5632.1A Protection Program Operations, of 2-9-88, Attachment 2. (5633.3, Change1)

Scrap nuclear material

Unirradiated nuclear material, not usable in its existing form, that is mixed with other material necessitating chemical treatment to render it useful and which can be recovered safely and economically. Excluded are nuclear materials that: (a) are process feed or pipeline; (b) are readily recovered in generating program facilities; or (c) require treatment to remove decay products prior to programmatic use. (5660.1)

Screening

The process of circulating real property availability notices to determine if there is a requirement for use by another organization or agency. (4300.1B)

Screening station

An air terminal security checkpoint, frequently consisting of an X-ray screening station with guards, who conduct physical inspections of persons, bags, and parcels passing through. (5635.3)

Sealed source

Nuclear material (generally for use in test and calibration) which has been packaged to be environmentally and critically safe. (5633.3, Change 1)

Secom

The high frequency radio communications network operated by the Albuquerque Operations Office in support of transportation safeguards. (5632.1A)

Secondary Action Activities (SAA)

Heads of Departmental Elements responsible for ancillary, technical, or legal aspects covered in a GAO report. (2340.1B)

Secondary document

Those reports that are discrete portions of primary documents and are typically input or feeder documents within the remedial investigation/feasibility study or remedial design/remedial action process. (5400.4)

Second line organization level

The DOE element that is contractually or organizationally responsible for the work or job tasks being performed by an operating level. It may be an operation office, or an Assistant Secretary directly responsible for an energy technology center or a power administration. (5482.1B)

Secret

1: The classification level applied to classified matter of which the unauthorized disclosure reasonably could be expected to cause serious damage to the national security. (5632.1A); 2: The classification level between confidential and top secret which is applied to information which unauthorized disclosure could reasonably be expected to cause serious damage to the national defense or security. (5631.4); 3: The classification level applied to information, the unauthorized disclosure of which reasonably could be expected to cause serious damage to the national security. (5635.1A)

Secretarial Officers

Secretarial Officers

1: The Assistant Secretarial level officials that report directly to the Office of the Secretary. These officials along with the Secretary, Deputy Secretary, and Under Secretary (Office of the Secretary) comprise "the Secretary or the Secretary's designee" for the purposes of the determination authorized by DEAR 909.570-9(a)(3). (4220.4); 2: Within the context of this Order, includes the Administrators of the Bonneville Power and the Western Area Power Administrations. (1500.3); 3: Assistant Secretaries, the Inspector General; the General Counsel; Directors of Energy Research, Administration, Procurement and Contracts Management, and Hearings and Appeals; Controller, and the Administrators of the Energy Information Administration (EIA) and the Economic Regulatory Administration (ERA). For purposes of this Order, the Executive Secretary and Director of Equal Opportunity are included under the provisions for Secretarial Officers. (2020.1)

Secretary

1: Means the Secretary of DOE. (1000.2); 2: The Secretary of the DOE as provided by Section 102 of the Energy Reorganization Act of 1974. (5635.1A)

Secure automatic communications network

A data system designed to handle DOE's normal requirements for secure message and data traffic within the continental United States and to exchange such traffic via the Department of Defense automatic digital network and which allows access to the Department of State Diplomatic Telecommunications System and the General Services Administration Advanced Record System. (5500.1A, Change 1)

Secure communications center

A security area devoted in whole or in part to the encryption and decrypting of sensitive and/or classified information. (6430.1A) (5632.1A)

Security

1: Any and all measures taken to guard against theft, diversion, sabotage, and espionage. (5634.1A); 2: Activities through which DOE defines, develops, and implements its responsibilities, under the Atomic Energy Act of 1954, as amended, Federal statutes, Executive Orders, and other directives, for the protection of Restricted Data and other classified information or matter, nuclear weapons and nuclear weapon components, and for the protection of Department and Departmental contractor facilities, property, and equipment. Security is also applied to special nuclear materials. When physical, personnel, and technical security are combined with material control and material accountability, the protection is referred to as safeguards. (6430.1A) (5632.1A)

Security concern

Security advisory letter

A written notification to an individual following the favorable resolution of the individual's eligibility for access authorization after a security interview. The letter shall advise the individual that further involvement in the activity that prompted the interview could result in review of eligibility for access authorization under the terms of 10 CFR 710. (5631.2B)

Security area

1: A physically defined space containing a Departmental security interest and subject to physical protection and access controls. (6430.1A) (5631.2B) (5632.1A); 2: A physically defined space containing classified matter (documents or material) subject to physical protection and personnel access controls. See DOE 5632.4 for further information. (5637.1); 3: A physically defined space containing classified documents, information, or material and subject to physical protection and personnel access controls that include the requirement for escort of uncleared visitors. (5635.1A)

Security assurance

A written certification by which a specifically authorized official of a foreign government, with which the United States has an agreement for cooperation governing the exchange of classified information, informs the United States Government of the category of a security clearance held by an alien visitor, the scope of the investigation upon which the clearance determination is based, and personal identity data. (5631.4)

Security communications control center

A continuously manned operation located in Albuquerque, New Mexico, staffed, equipped, and operated by the Albuquerque Operations Office to provide necessary communications and actions to initiate immediate response to DOE transportation safeguards system emergencies involving nuclear weapons, component and devices, and strategic quantities of Government-owned special nuclear materials. (5500.1A, Change 1)

Security concern

The presence of information regarding an individual applying for or holding a PSAP position that may be considered derogatory under the criteria contained in 10 CFR Part 710. (5631.6)

Security container

Security container

- (a) **Security cabinet** A security cabinet which bears a test certification label on the inside of the locking drawer or door and is marked "General Services Administration Approved Security Container" on the outside of the top drawer or door.
- (b) **Safe** A burglar-resistant cabinet or chest having a body of steel at least 1/2-inch thick and a build-in, three position, changeable combination locked steel door at least 1-inch thick, exclusive of bolt work and locking devices.
- (c) **Vault** A burglar-resistant, windowless enclosure that meets the definition of an SNM vault as given in this Order. Additionally, vaults shall include an intrusion alarm system activated by an opening of the door.
- (d) **Vault-type room** A room having a combination locked door protected by an intrusion alarm system that is activated by any penetration of walls, floors, ceilings or openings, or by motion within the room.
- (e) **Built-in combination** Locks on security containers specified in subparagraphs (a), (b), and (c) shall meet Underwriter Laboratories Standard No. 768, Group 1-R or other standards which are approved by the field element and provide equivalent protection.

(5632.1A)

Security design review

A review process where the objective is to ascertain that implemented protective measures meet the original overall system design and approved computer application security requirements. The security design review may be a separate activity or an integral function of the overall application system design review activity. (1360.2A)

Security discipline (communications security)

Procedures which assure that no classified information or information which could be harmful to the security force or its mission accomplishment (e.g., friendly positions, intentions) is transmitted in clear text over unsecure communications channels. (5632.1A)

Security education program

A continuing, comprehensive campaign incorporating modern instructional methods and communication techniques designed to acquaint employees with their security responsibilities, to maintain employee security awareness, and to promote employee compliance with applicable security regulations and procedures. (5631.1A)

Security facility

1: A specified physically bounded area, individually certified by the cognizant security officer in accordance with DOE 5632.1A, which has been approved by the Department for generating, receiving, using, processing, storing, reproducing, transmitting, destroying, or handling special nuclear material or classified matter. Lists of such facilities are provided to Headquarters in accordance with paragraph 8d(16). A security facility temporarily sanitized to protect a security interest during a visit or assignment continues to be a security facility for the purposes of this Order. (1240.2A); 2: Any facility that has been approved by the Department for generating, receiving, using, processing, storing, reproducing, transmitting, destroying, or handling Special Nuclear Material or classified matter. (5632.1A) (5634.1A) (5480.16, Change 2)

Security inspector

A uniformed Departmental contractor person who is employed for, and charged with, the protection of classified matter, special nuclear material, or other government property and who is authorized under section 161K of the Atomic Energy Act of 1954, as amended, or other statutory authority to carry firearms and to make arrests without warrant. (5480.16, Change 2) (5632.1A)

Security interest

Any of the following that requires special protection: classified matter, Special Nuclear Material, security shipments, secure communication centers, sensitive compartmented information facilities, automatic data processing centers, or other systems including classified information, or Departmental property. (6430.1A) (5634.1A) (1240.2A) (5632.1A) (5635.1A)

Security office

A Headquarters or field security office which is responsible for granting facility approval for the handling, receipt, storage, or production of classified matter. (5635.3)

Security, physical

Security, physical

See Physical protection. (5634.1A)

Security plan

A plan developed and implemented to protect DOE and DOE contractor personnel and facilities, and to prevent the compromise of a DOE security interest or sensitive subject to a foreign visitor or assignee; this is a critical element of the visit's and assignment's system. (1240.2A)

Security shipment

A shipment between security areas, DOE facilities, or non-DOE facilities consisting of classified matter or Special Nuclear Material. (5632.1A)

Security survey

On-site examination of the devices, equipment, personnel, and procedures employed at a facility to safeguard SNM, classified matter, and/or DOE property. (5634.1A)

Segment

A portion of the isolation zone that is in alarm and monitored such that the portion of the isolation zone that is in alarm can be identified. (5632.1A)

Seismic category I

A level and method of seismic qualification that provides documented assurance that an item, component, or system can continue to perform its required function. Qualification includes all SC-1 and selected SC-2 and SC-3 items, components, or systems. (6430.1A)

Selecting official

The management official responsible for making the final employment decision regarding an individual seeking a PSAP position. (5631.6)

Self-checking

A feature to ensure secure operation of an alarm system; the system may periodically monitor the sensor transducer and signal processing circuits. Many systems such as vibration, strain and pressure require self-excitation of the sensor transducer; while others such as microwave and infrared, monitor the signal level at the receiving transducer. (5632.1A)

Senior Reactor Operator

Self-evaluation

A critical evaluation of a facility training program measured against the accreditation objectives and criteria. This evaluation is conducted by the contractor. (5480.18)

Self-insurance

A method of dealing with loss, with or without advance funding, with no transfer of risk to a third party. (3890.1)

Semiautomatic firearm

A type of firearm that employees either gas pressure or recoil force and mechanical spring action in ejecting the empty cartridge case after the first shot and loading the next cartridge from the magazine, but that requires release and another pressure of the trigger for firing each successive shot. (5480.16, Change 2)

Senior controller

Responsible for assigning tasks and coordinating the efforts of all controllers during advanced firearms training and force-on-force exercises. (5480.16, Change 2)

Senior Federal Emergency Management Agency Official

The official appointed by the Director of the Federal Emergency Management Agency, or his or her representative, to direct the Federal Emergency Management Agency response at the scene of a radiological emergency. The Senior Federal Emergency Management Agency Official serves as the focal point for promoting the coordination of the Federal response activities at the scene of an emergency. (5500.1A, Change 1)

Senior Official of the Intelligence Community

The senior official from a Department/Agency for the intelligence community charged with implementing DCI policy and directives within his or her organization. Within DOE, the Secretary is the Senior Official of the Intelligence Community. (5635.1A)

Senior Reactor Operator

An individual certified by contractor management to operate or to direct the operation of a DOE-owned Category A reactor. (5480.6)

Senior Scientific Adviser (SSA)

Senior Scientific Adviser (SSA)

The senior scientist selected by the DOE team leader or Onscene Commander who is in consultation with the weapons/design laboratory associated with/that produced the weapon involved in an accident/(or) incident and who serves as the primary scientific/technical adviser to the DOE Team Leader or Onscene Commander. (5530.1) (5500.1A, Change 1)

Sensitive Compartmented Information (SCI)

1: All classified information and materials bearing intelligence community special access controls formally limiting access and dissemination, does not include Restricted Data, as defined in the Atomic Energy Act of 1954, as amended. (5632.1A) (5634.1A); 2: Consists of information and materials requiring special intelligence community controls that indicate restricted handling within present and future community intelligence collection programs and their end products. These special community controls are formal systems of restricted access established to protect the sensitive aspects of sources and methods and analytical procedure of foreign intelligence programs. The term does not include Restricted Data as defined in the Atomic Energy Act of 1954, as amended. (1500.3); 3: Classified information concerning or derived from intelligence sources, methods, or analytical processes, which is required to be handled within formal access control systems established by the Director of Central Intelligence. (5670.2); 4: All information and material requiring special controls for restricted handling within compartmented intelligence systems and for which compartmentation is established. (5300.4B)

Sensitive compartmented information facility

An accredited area, room, group of rooms, or installations where sensitive compartmented information may be stored, used, and/or electronically processed. (5632.1A) (5670.2) (5634.1A)

Sensitive country

A country to which particular consideration is given for policy reasons during the DOE internal review and approval process of visits and assignments by foreign nationals. Countries may appear on this list for reasons of national security, nuclear nonproliferation, regional instability, or terrorism support. The DOE list (Attachment 3) does not necessarily reflect the policies or views of any other agency of the U.S. Government. For purposes of this Order, a foreign national is considered to be from a sensitive country if any of the following is true:

continued on next page

Sensitive nuclear material production information

Sensitive country (continued)

- (a) citizen of a sensitive country;
- (b) place of employment in a sensitive country;
- (c) place of birth in a sensitive country unless the person is now a U.S. Citizen; or
- (d) a stateless person.

(1240.2A)

Sensitive duties

Those duties performed by employees in testing designated positions which have the potential for adversely affecting health, safety or national security. (3220)

Sensitive facility

A designated DOE facility listed in Attachment 4 which contains one or more security facilities and/or nonproliferation information or technology, or other sensitive subjects. (1240.2A)

Sensitive material

Any raw, in process, or manufactured commodity, equipment, component, assessor part, assembly, or product concerning all classified information and materials bearing intelligence community special access control formally limiting access and dissemination. (5632.1A)

Sensitive nuclear material

Production information is:

- (a) secret production rate or stockpile quantity information relating to:
 - (1) Plutonium;
 - (2) Tritium;
 - (3) Lithium enriched in lithium 6; or
 - (4) U-235.
- (b) Classified gaseous diffusion technology.
- (c) Classified gas centrifuge technology.
- (d) Classified advanced isotope separation technology.

(5631.4)

Sensitive nuclear material production information

Classified production rate or stockpile quantity information relating to plutonium, tritium, enriched lithium-6 and uranium-235 and -233. (5635 .1A)

Sensitive official travel**Sensitive official travel**

Includes official travel to those countries identified in Attachment 2 or official travel to any country when a sensitive topic will be discussed in Attachment 3. (1500.3)

Sensitive subject

Unclassified subject/topic identified by DOE (Attachment 5) which involves information, activities, and/or technologies that are relevant to national security. Disclosure of sensitive subjects has the potential for enhancing nuclear weapons capability, leading to nuclear proliferation, divulging militarily critical technologies, or revealing other advanced technologies. Therefore, they require special management oversight, especially prior to release to foreign nationals. Some sensitive subjects listed in Attachment 5 are already controlled as Unclassified Controlled Nuclear Information or as Export Controlled Information under U.S. laws and regulations. (1240.2A)

Sensitive unclassified information

1: Plain text or machine-encoded data that, as determined by competent authority (e.g., information owners) has relative sensitivity and requires mandatory protection because of statutory or regulatory restrictions (e.g., Unclassified Controlled Nuclear Information, Official Use Only Information, Privacy Act Information) or requires a degree of discretionary protection because inadvertent or deliberate misuse, alteration, disclosure, or destruction could adversely affect national or other DOE interests (e.g., program critical information, or controlled scientific and technical information which may include computer codes (computer programs) used to process such information). (1360.2A); 2: Unclassified but sensitive data requiring protection because of the risk and magnitude of loss or harm that could result from inadvertent or deliberate disclosure. (5631.1A)

Sensitive unofficial travel

Travel to those countries identified in Attachment 2 by individuals who hold or have held within the last 5 years a DOE access authorization, and is not included in the definition of official foreign travel. (1500.3)

Sensitivity

The minimum amount of radionuclide or other material of interest that can repeatedly be detected by an instrument, system, or procedure. (5400.XY)

Separate contract

A utility services contract executed for a period not to exceed 10 years, to cover the utility services to a delivery point(s). (4540.1B)

Sequential sampling

Refers to timed samples collected from an effluent stream. (5400.XY)

Serious condition

An unsafe or unhealthful working condition in which there is a substantial probability that death or serious physical harm could result. (3790.1A)

Service magazine

An auxiliary building of an operating line used for the intermediate storage of explosives within the operational plant area. The amount of explosives is normally limited to a maximum constant with interline separation from other explosive's buildings based on the quantity of explosives in the service magazine. (6430.1A)

Service year

One 12-month period starting with the first date of appointment. (3304.1)

Setback

Building offset from a property line, sidewalk, or street right-of-way. (6430.1A)

Settleable solids

Solids suspended in waste water that are determined to be suitable using Method 209 E, Settleable Solids pp. 98 and 99, 16th edition, Standard Methods for Examination of Water and Waste Water. (5400.5, Change 1)

Sewerage terms

- (a) Sewage means the waste matter that passes through sewers.
- (b) Sewer means the artificial conduit, usually underground, for carrying off waste water and refuse.
- (c) Sewerage means the system of sewers.

(5400.XX) (5400.5, Change 1)

Shadow force

An armed security force stationed away from an exercise area and under the continuous supervision of a controller, preferably a security officer.
(5480.16, Change 2)

Shadow force weapons

Shadow force weapons

Live fire weapons used by shadow forces to respond to an actual security alarm that may occur during a security exercise. (5480.16, Change 2)

Shall

Denotes a requirement. (6430.1A)

Shall consider

Requires that an objective assessment be performed to determine to what extent the specific factor, criterion, guideline, standard, etc., will be incorporated into or satisfied by the design. The results and basis of this assessment shall be documented. Such documentation shall be retrievable and can be in the form of engineering studies, meeting minutes, reports, internal memoranda, etc. (6430.1A)

Shall statements

Indicate performance criteria and procedures required to operate and maintain an acceptable radiation protection program for the public and the environment. (5400.XY)

Sharing

The provision of available ADP resources to users by an organization with no primary programmatic responsibility for supporting those users. (1360.1A)

Sharing with other federal agencies

Sharing of excess data processing capacity with users from another government agency wherein only such services are provided. It does not apply, for example to situations where the Department is doing research and development or other programmatic work for another agency, and data processing capacity is used to support this effort. (2100.8)

Sheet piling

Closely-spaced piles of wood, steel, or concrete driven vertically into the ground to obstruct lateral movement of earth or water. (6430.1A)

Shelter

A facility used to protect, house, and supply the essential needs of designated individuals during the period of an emergency. A shelter may or may not be specifically constructed for such use, depending on the type of emergency and the specific programmatic requirements. (5500.1A, Change 1)

Shotgun, semiautomatic

Shield

A metal (or other material), police-type badge imprinted with the name of the issuing authority, and the serial number of the badge, which provides additional identification of the bearer. (5632.1A)

Shipment

The activity or process of shipping; i.e., preparing and tendering a shipment to a carrier for offsite transport. The term includes packaging, labeling, marking, and preparation of shipping papers along with the material being shipped. (5480.3A)

Shipper

1: The person (or his or her agent) who tenders a shipment for transportation. The term includes persons who prepare packages for shipment, and offer packages to a carrier for transportation by signature shipping paper. (1540.1, Change 1); 2: The organization that tenders a shipment to any commercial carrier for transport. (5480.3A)

Shipper/receiver difference

The difference between the measured quantity of nuclear material stated by the shipper as having been shipped and the measured quantity stated by the receiver as having been received. (5633.3, Change 1)

Shoring

Temporary bracing of an existing building foundation to provide support during adjacent excavations. Also applies to supporting construction of above grade floors. (6430.1A)

Short-range plan

A documented, tactical (1 year) plan describing the implementation of the Classified Computer Security Program. (5637.1)

Shotgun, pump

A shotgun that uses a pumping or sliding action to eject the fired round and load the next round from the magazine into the chamber. (5480.16, Change 2)

Shotgun, semiautomatic

A shotgun, that by means of a gas tube or recoil, automatically ejects the round fired and loads the next round from the magazine automatically into the chamber. (5480.16, Change 2)

Should

Should

Denotes a recommendation. (6430.1A)

Should statements

Indicate flexible guidance for an acceptable radiation protection program.
(5400.XY)

Shutdown

That condition in which a reactor facility has ceased operation and DOE has declared officially that it does not intend to operate the reactor further.
(5480.6)

Sigma categories

Restricted Data and/or Formerly Restricted Data in the following categories which concern the design, manufacture, or utilization of atomic weapons, or utilization of atomic weapons or nuclear explosive devices. See Weapon data.

- (a) **Sigma 1** Theory of operation (hydrodynamic and nuclear) or complete design of thermonuclear weapons or their unique components.
- (b) **Sigma 2** Theory of operation or complete design of fission weapons or their unique components. This includes the high explosive system with its detonators and firing unit, pit system, and nuclear initiation system as they pertain to weapon design and theory.
- (c) **Sigma 3** Manufacturing and utilization information not comprehensively revealing the theory of operation or design of the physics package. Complete design and operation of nonnuclear components but only information as prescribed below for nuclear components. Utilization information necessary to support the stockpile to target sequence. Information includes:
 - (1) general external weapon configuration, including size, weight, and shape;
 - (2) environmental behavior, fuzing, ballistics, yields, and effects;

continued on next page

(c) **Sigma 3 (continued)**

- (3) nuclear components or subassemblies which do not reveal theory of operation or significant design features;
- (4) production and manufacturing techniques relating to nuclear components or subassemblies;
- (5) anticipated and actual strike operations.

(d) **Sigma 4** Information inherent in preshot and postshot activities necessary in the testing of atomic weapons or devices. Specifically excluded are the theory of operation and the design of such items. Information includes:

- (1) logistics, administration, other agency participation;
- (2) special construction and equipment;

note: Sigma 1 and Sigma 2 generally, but not completely, equate to the CNWDI defined on page 1, subparagraph a.

- (3) effects, safety;
- (4) purpose of tests, general nature of nuclear explosive tested including expected or actual yields and conclusions derived from tests not to include design features.

(e) **Sigma 5** Production rate and/or stockpile quantities of nuclear weapons and their components.

(f) **Sigma 9** General studies not directly related to the design or performance of specific weapons or weapon systems, e.g., reliability studies, fuzing studies, damage studies, aerodynamic studies, etc.

(g) **Sigma 10** Chemistry, metallurgy, and processing of materials peculiar to the field of atomic weapons or nuclear explosive devices.

(h) **Sigma 11** Information concerning inertial confinement fusion which reveals or is indicative of weapon data.

continued on next page

Sigma categories

Sigma categories (continued)

- (i) **Sigma 12** Complete theory of operation, complete design, or partial design information revealing either sensitive design features or how the energy conversion takes place for the nuclear energy converter, energy director or other nuclear directed energy weapon systems or components outside the envelope of the nuclear source but within the envelope of the nuclear directed energy weapon.

Note: Theory of operation or complete design information for a nuclear directed energy weapon requires access to Sigmas 1, 2, and 12 information. Cleared persons not requiring access to Sigmas 1, 2, or 12 information will normally be granted Sigmas 3 and 13, as appropriate.

- (j) **Sigma 13** Manufacturing and utilization information and output characteristics for nuclear energy converters, directors or other nuclear directed energy weapon systems or components outside the envelope of the nuclear source, not comprehensively revealing the theory of operation, sensitive design features of the nuclear directed energy weapon or how the energy conversion takes place. Information includes:

- (1) general, external weapon configuration and weapon environmental behavior characteristics, yields, and effects;
- (2) component or subassembly design that does not reveal theory of operation or sensitive design features of nuclear directed energy weapons categorized as Sigmas 1, 2, or 12;
- (3) production and manufacturing techniques for components or subassemblies of nuclear directed energy weapons that do not reveal information categorized as Sigmas 1, 2, or 12.

(5610.2)

Significant enhancement of an ongoing system

Significant change

Refers to change in an unclassified computer installation which could impact overall processing requirements and conditions or installation security requirements—e.g., adding a local area network; changing from batch to online processing; adding dial-up capability; carrying out major hardware configuration upgrades; operating system changes; making major change to the physical installation; or changing installation location. (1360.2A)

Significant computer security incident

The occurrence of an event which would be of concern to senior DOE management due to potential for public interest or embarrassment to the organization, or potential for occurring at other DOE sites; these events would include such things as unauthorized access, theft, an interruption to computer service or protective controls, and incident involving damage, a disaster, or discovery of a vulnerability. (1360.2A)

Significant deviation

This includes:

- (a) changes in approved funding strategies for major items of ADPE (e.g., accelerated payments or buyout of lease to ownership contracts, or purchase of leased items);
- (b) changes to the type of funds budgeted and approved for use with a specific major item of ADPE (capital, operating, or construction);
- (c) substantive changes in release dates of leased ADPE;
- (d) significant changes to the scope of items to be acquired; and
- (e) changes in the fiscal year in which the item is to be acquired.

(1360.1A)

Significant enhancement of an ongoing system

Enhancement(s) of an ongoing system which will: (a) require expenditures of \$50,000 or more to design and implement; or (b) result in increase of operating cost (labor, equipment, material) of \$50,000 or more annually. (1324.4)

Significant environmental compliance issue

Significant environmental compliance issue

A significant environmental compliance issue is one which is or has the potential of being precedent setting or controversial, and/or involves Headquarters notification, concurrence, or approval. Examples of environmental compliance issues which may be significant include, but are not limited to:

- (a) settlement agreements involving DOE and other potentially responsible parties and regulatory authorities for cleanup of hazardous waste sites;
- (b) hazardous waste and mixed waste permits and permit applications;
- (c) proposed consent decrees and consent administrative orders related to environmental compliance;
- (d) notices of violations, administrative orders, or other notifications from regulatory authorities such as State or Environmental Protection Agency (EPA) warning letters or similar actions alleging lack of compliance with environmental regulations or requirements;
- (e) proposed Federal Facility Compliance Agreements, memorandums of understanding, or any other agreements involving environmental compliance with local, State or Federal entities;
- (f) lawsuits pertaining to environmental compliance, including proposed settlements, notices of intent to sue, and other related matters;
- (g) results of verification activities such as inspections, audits, reviews, surveillances, appraisals, or assessments by contractors, field elements, Headquarters, or Federal, State, and local regulatory agencies that reveal noncompliance issues;
- (h) reports or other notifications to or from Federal, State, or local regulatory authorities concerning violations of environmental regulations, permits, or agreements.

(5400.2A)

Significant safety concern

Significant modification

1: A change to a nuclear facility that involves an unreviewed safety question.
(5481.1B, Change 1) (5480.5)

Significant needed improvements

Those known internal control deficiencies in internal management control systems for which prompt corrective action must be taken to establish, alter, or supplement internal controls in order to prevent waste, loss, mismanagement, unauthorized use, or misappropriation of resources. Significant needed improvements have less substantial impact than material needed improvements. (1000.3B)

Significant quantities

Masses of fissionable materials greater than a safe mass. See Safe mass.
(5480.5)

Significant safety concern

Characterized by any one of the following:

- (a) causes, or has the potential for, undue risk to the health and safety of the public and onsite workers, the environment or government property;
- (b) any proposed change, test, or experiment at the facility that is deemed to involve an unreviewed safety question;
- (c) results in degradation of management or operational performance, or components and systems that are important to the safety of the facility;
- (d) indicates a trend, which if continued, could lead to degradation of management or operational performance, or components and systems that are important to the safety of the facility;
- (e) results in any of the following: actuation of any engineered safety feature of the facility (except under controlled test), or operation of the facility outside of approved limits; or
- (f) results in the failure of safety equipment or systems to perform their intended safety functions.

(5480.XX)

Significant system alarm

Significant system alarm

Any facility safeguards and security capability that provides a communicable indication of a malevolent act involving radiological or industrial sabotage, espionage, or the theft or diversion of classified matter or nuclear materials which could be used to construct an improvised nuclear device, a nuclear device, or unauthorized detonation of a weapon or test device. (5634.1A)

Significant vulnerability

The loss of, or discovered way to bypass, an essential safeguards and security system component or set of components for which there is no effective backup. (5436.1)

Single failure

An occurrence that results in the loss of capability of a component to perform its intended safety function(s). Multiple failure, i.e., loss of capability of several components, resulting from a single occurrence are considered to be a single failure. System are considered to be designed against an assumed single failure if neither:

- (a) a single failure of any active component (assuming passive components function properly) nor,
- (b) a single failure of any passive component (assuming active components function properly) results in loss of the system's capability to perform its safety function(s).

(6430.1A)

Single Integrated Financial Management System (SIFMS)

The inventory of Department-level FMSs that includes the primary accounting system, subsidiary financial systems and program financial systems. The totality of these integrated systems functions for budget formulation and execution, program and administrative accounting, audit, and generates financial information in support of the DOE mission, as well as the reporting requirements of law and the information needs of the Executive Branch control agencies—OMB, Treasury, Commerce, GSA, the Congress, and the public. (2200.12)

Site

1: A geographic entity comprising land, buildings, and other facilities/structures and utilities required to perform program objectives. Generally a site has, organizationally, all of the required facilities real property management functions. That is, it is not a satellite of some other site. See definition of Special area. (4330.2C) (4330.4); 2: Refers to the overall DOE complex consisting of one or more facilities located in defined geographic areas. (5400.XY); 3: For purposes of this order, a site is defined to be a Departmental field element, including operations offices, power marketing administrations, and energy technology centers, a management and operating contractor, and/or Headquarters—with the Energy Information Administration considered to be a separate site. (1330.1C); 4: One or more operational facilities, usually geographically contiguous, operated by or for the DOE under the management and administrative direction of a DOE or DOE contractor organization. (5937.1); 5: An area of land that contains a DOE facility or facilities and is either owned or leased by DOE or the Federal Government which may be divided by a right-of-way. A DOE site and facility may or may not have the same boundaries. The general public may or may not have access. (5480.3A)

Site boundary

A well-marked boundary of the property over which the owner or operator can exercise strict control without the aid of outside authorities. (6430.1A)

Site development

The orderly, continuing process by which new and existing facilities are planned and developed or adapted for the changing needs of each site. Reference AL Order 4320.1-Site Development and Facility Utilization. (4330.4)

Site development plan

A formal written document summarizing all of the various data necessary to plan for the most effective utilization, orderly future development, and disposal of land and facilities at an individual site. It consists of six parts: (a) Executive Summary; (b) Site General Information; (c) Existing Conditions; (d) Planning Analysis; (e) Master Plan; and (f) 5-Year Plan. (4300.1B)

Site director

An individual who is in direct charge of the site's funding and operation, including the real property management function, whether physically located at the site or at some other location. (4330.4)

Site occupational medical director**Site occupational medical director**

A physician responsible for the overall direction and operation of the occupational medical program at a particular site or their designee. (3220)
(5631.6) (5480.YY)

Site safeguards and security plan

A description of the systems and procedures implemented and planned to protect Departmental security interests and other property. The format for site specific safeguards and security plans may be obtained from DP-34.
(5632.1A)

Site specific

A term used in reference to emergency plans that encompasses the contiguous DOE site which may contain several nuclear facilities.
(5500.3, Change 1)

Site specific safeguards and security plan

A specific description of the systems and procedures implemented and planned to protect Departmental security interests and other property. The format for site specific safeguards and security plans can be obtained from DP-34. (6430.1A)

Situation Analysis Report (SAR)

The Situation Analysis Report is an assessment of the dimensions (i.e., magnitude, duration, impact) of an actual or impending energy emergency condition prepared by the EEMT. (5500.8)

Sixteen Personality Factor Test (16PF)

A factor analyzed questionnaire test which yields 16 major personality factors, multiple second order factors, and constellations of these factors. (5480.YY)

Slanting

The incorporation, without appreciable extra cost or reduction in efficiency, of certain architectural and engineering features into new structures (except temporary type) or portions of the structures to improve their ability to resist and to offer protection to personnel and material. (6430.1A)

Small arms

Handcarried firearms, including revolvers, pistols, rifles, and submachine guns. (5480.16, Change 2)

Small business 8(a) program

The program, established by section 8(a) of the Small Business Act, authorizing SBA to enter into contracts with other agencies and to award subcontracts to qualified small disadvantaged business concerns for the services or supplies required under those contracts. (4250.1)

Small business administration procurement center representative

The individual assigned by the SBA as its representative at certain Department of Energy (DOE) contracting activities. (4250.1)

Small business concern

A concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria and size standards in 13 CFR 121. (4250.1)

Small business/disadvantaged business specialist

The individual(s) designated by the Head of a Contracting Activity to review proposed procurements, as provided by this Order. (4250.1)

Small business/labor surplus area set-aside and 8(a) program review

The screening (review) by the cognizant small business/disadvantaged business specialist of a proposed procurement to ascertain if it may be set aside for competition among small businesses and/or labor surplus area concerns only or awarded under the 8(a) Program, pursuant to FAR subparts 19.5, 19.8, and 20.2, respectively. (4250.1)

Small disadvantaged business concern

A small business concern that is: (a) owned at least 51 percent by one or more individuals who are both socially and economically disadvantaged; or (b) publicly owned having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals and has its management and daily business controlled by one or more such individuals. (4250.1)

Smoke grenade

A pyrotechnic device capable of generating large amounts of smoke. While smoke grenades do not emit projectiles, they may emit fragments on actuation and may generate sufficient heat to cause fires and to injure personnel. (5480.16, Change 2)

SNM vault

SNM vault

A penetration-resistant, windowless enclosure that has:

- (a) walls, floor, and ceiling substantially constructed of materials that afford penetration resistance at least equal to that of 8-inch thick reinforced concrete;
- (b) any opening greater than 96 square inches in area and over 6 inches in the smallest dimension protected by imbedded steel bars at least 5/8 inches in diameter on 6-inch centers both horizontally and vertically;
- (c) a built-in combination locked steel door that in existing structures is at least 1-inch thick exclusive of bolt work and locking devices and that for new structures at least meets the Class 5 standards as set forth in FS AA-D-6008 of the Federal Specifications and Standards cited in 41 CFR 101.

(6430.1A)

Software

1: The general purpose software including operating system software, utilities, sorts, language processors, access methods, data base processors, and other similar multiuser software. (2100.8); 2: Computer programs, procedures, rules, and any associated documentation and data developed for the operation of a software product. (QC-1, Rev. 5) (QC-2) (1330)

Software engineering

The systematic approach to the development, operation, maintenance, and retirement of software. (1330) (1330.1C)

Software management methodology

The body of methods, rules, and procedures employed to accomplish the individual steps needed to properly manage software. (1330) (1330.1C)

Software product

A software entity designated for delivery to a user, including the computer code, procedures necessary to run the code, and all of the documentation required to fully utilize and maintain the code. (1330) (1330.1C)

Software product life cycle

The period of time that starts when it is decided that the need for certain functionality can best be met by the use of a software product and ends when that product is retired from use. (1330) (1330.1C)

Software quality assurance

A planned and systematic pattern of all actions necessary to provide adequate confidence that a software product conforms to established technical requirements. (QC-1, Rev. 5)

Soil column

1: An in situ volume of soil down through which liquid wastes percolate from ponds, cribs, seepage basins, or trenches. (5400.5, Change 1); 2: An in situ volume of soil down through which liquid wastes percolate from ponds, cribs, seepage basins, trenches, injection wells, etc., for the purpose of treatment (e.g., filtration and ion exchange) so that the soil retains dissolved or suspended radionuclides. (5400.XX)

Soil mechanics

The application of the laws of soil and fluid mechanics to soils and similar granular materials as a basis for design, construction, and maintenance of stable foundations and earth structures. (6430.1A)

Soil resistivity

The measured potential difference between two points in a naturally occurring soil between which a known electric current is passed. (6430.1A)

Sole source procurement

A "sole source procurement" is one in which the Government's requirements are set forth in the form of specifications that are so restrictive that there is only one known supplier capable of satisfying the Government's requirement. Sole source procurements require a written justification and approval in accordance with DOE 4200.1B, Competition In Contracting, of 4-17-85, or the contractors approved procurement procedures. (1360.1A)

Source

A single process or release point that contributes to or causes a release to the environment and that can be separated from other processes by a break in the flow of material. (5400.XY)

Source document

Source document

A document, other than a classification guide, from which information is extracted for inclusion in another document. The term, source document, is used in the context that the classification of information extracted from the document is determined by the classification specified in the source document for the information extracted. (5635.1A)

Source material

1: Pursuant to the provisions of section 61 of the Atomic Energy Act of 1954, as amended, uranium, thorium, or any other material which is determined to be source material, or ores containing one or more of the foregoing materials in such concentration as may be determined by regulation from time to time. (5632.1A); 2: Uranium and Thorium. (2110.1A); 3: Uranium or thorium, or any combination thereof, in any physical or chemical form; or ores which contain by weight one-twentieth of one percent (0.5%) or more of (a) uranium, (b) thorium, or (c) any combination thereof. Source material does not include special nuclear materials. (5500.1A, Change 1); 4: Uranium, thorium, or any other material determined, pursuant to the provision(s) of Section 61 of the Atomic Energy Act of 1954, as amended, to be source material; or ores containing one or more of the foregoing materials in such concentration as may be determined by regulation. (5634.1A)

Source (radioactive)

A known amount of radioactive material emanating a characteristic amount of energy in the form of alpha, beta, gamma, or x-ray emissions or a combination of such emissions. (5400.XY)

Special access program

Any program imposing need-to-know or access controls beyond those normally provided for access to Confidential, Secret, or Top Secret Information. Such a program may include, but is not limited to, special clearance, adjudication, or investigative requirements, special delegations of officials authorized to determine need-to-know, or special lists of persons determined to have a need-to-know. (5635.1A)

Special access program and special access required

Other compartmented information activities which may be housed in SCIFs, and require special controls and access restrictions. (5670.2)

Special form radioactive material

Special area

An "off the main site" piece/parcel of real estate that is not large enough or organizationally separate enough to be considered an individual site in itself. (4330.4) (4300.1B)

Special assemblies

Special assemblies are those major assemblies of nuclear weapon components which do not comprise a complete nuclear explosive or nuclear test device and, therefore, are not capable of producing a nuclear detonation. (5610.1)

Special assembly

A major assembly of nuclear weapon components that does not comprise a complete nuclear explosive and, therefore, is not capable of producing a nuclear detonation. (5610.10)

Special burdens

Unusual or substantial burdens placed on a State or local government by the Atomic Energy Act related activities of the Department. Special burdens are incurred by extraordinary services that are not normally required by a community on a routine basis. The mere fact that a State or local government is burdened by the activities of the Department does not constitute a special burden. (2100.12)

Special foreign currency program appropriations

Appropriation made available to incur obligations for which payments must be made only in the United States—owned foreign currencies that are declared in excess of the normal requirements of the United States by the Secretary of the Treasury. The appropriations is made in general fund dollar amounts, which are credited to the account or fund generating the currency or to miscellaneous receipts of the Department of the Treasury, as appropriate. The appropriated dollars are exchanged for excess foreign currency (held in the Department of the Treasury foreign currency fund accounts), and used to make payments. (2200.4)

Special form radioactive material

To qualify as special form the radioactive material must either be in massive solid form or encapsulated. Special tests which are required of special form material are explained in 49 CFR 173.403. (5480.3)

Special government employee

Special government employee

An expert or consultant retained, designated, appointed, or employed with or without pay for 130 days or fewer days during any period of 365 consecutive calendar days. (3304.1)

Specialized information analysis centers

Those program office sponsored, DOE and DOE contractor operations that collect, evaluate, announce, and provide scientific and technical computer software in specialized subject areas. These centers are responsible for providing scientific and technical computer software summaries and/or programs to the centralized computer management activity for announcement and for dissemination outside the Department, its contractors, and existing foreign information exchange agreements. The centers include the Engineering Physics Information Center of the Oak Ridge National Laboratory, and the National Nuclear Data Center of Brookhaven National Laboratory. (1360.4A)

Special management computer

A general purpose computer used in one of the following categories.

- (a) **Control** ADPE that is a vital part of a facility or larger complex of non-ADPE and has the primary purpose of real-time process control functions (including controlling, monitoring, analyzing, or measuring a process) for the facility or non-ADPE.
- (b) **Data Acquisition** ADPE that is an essential part of a facility or larger non-ADPE item or system and has the primary purpose of collecting data from the facility or equipment for further analysis.
- (c) **Classified** ADPE whose physical location is classified information.
- (d) **Mobile** ADPE located on ships, planes, trains, or motor vehicles.

(1360.1A)

Special messenger

A DOE employee, or member of the armed forces, assigned to and performing duties under the direction and control of the DOE, who is authorized to routinely transport Secret and Confidential matter. (5635.1A)

Special Nuclear Material facility approval

Special Nuclear Material (SNM)

1: Plutonium or Uranium enriched in the isotope 233 or in the isotope 235, or any materials artificially enriched by any of the foregoing. Special Nuclear Material does not include source material. (2110.1A) (5633.3, Change 1); 2: Plutonium, uranium-233, uranium enriched in uranium-233 or in the uranium-235, or any material artificially enriched in any of the foregoing (but does not include source material) and any other material that, pursuant to the provision of Section 51 of the Atomic Energy Act of 1954, as amended, has been determined to be Special Nuclear Material. (6430.1A); 3: Plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Nuclear Regulatory Commission, pursuant to the provisions of Section 51 of the Atomic Energy Act, determines to be Special Nuclear Material, but does not include source material; or any material artificially enriched by any of the foregoing but does not include source materials. (5500.1A, Change 1); 4: Plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which is determined to be SNM, pursuant to section 51 of the Atomic Energy Act of 1954, but does not include source material, or any material artificially enriched by any of the foregoing. (5632.1A); 5: As defined in Section 11 of the Atomic Energy act of 1954, as amended, means (a) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which is determined to be SNM, pursuant to section 51 of the Atomic Energy Act of 1954, but does not include source material; or (b) any material artificially enriched by any of the foregoing, but does not include source material. (5631.2B)

Special Nuclear Material facility

1: An educational institution, plant, laboratory, office, or building which contains SNM and utilized by the Department, its contractors, subcontractors, or consultants. (5632.1A); 2: Any facility which has been approved by DOE to possess SNM. (5634.1A)

Special Nuclear Material facility approval

A determination based upon a satisfactory review of a safeguards and security plan and an onsite survey by the responsible operations office that a facility is approved to receive, use, process, and/or store SNM. (5632.1A)

Special Nuclear Material vault

Special Nuclear Material vault

A penetration-resistant, windowless enclosure which has:

- (a) walls, floor, and ceiling substantially constructed of materials which afford forced penetration resistance at least equivalent to that of 8-inch thick reinforced concrete;
- (b) any openings greater than 96 square inches in area and over 6 inches in the smallest dimension protected by imbedded steel bars at least 5/8 inches in diameter on 6-inch centers both horizontally and vertically;
- (c) a built-in combination locked steel door which in existing structures is at least 1-inch thick exclusive of bolt work and locking devices and which for new structures meets the Class 5 standards set forth in Federal Specification AA-D-6008 of the Federal Specifications and Standards, cited in Title 41 CFR Part 101.

(5632.1A)

Special process

Those discrete arts of a manufacturing system, such as welding, heat treating and nondestructive examination, which are highly dependent on the control of equipment, procedures, and/or the skill of the operator, and in which conformance cannot readily be determined by inspection or test.

(QC-1, Rev. 5)

Special purpose ADPE

A computer specially designated and not just configured to perform a special application or function. (1360.1A)

Spent fuel

Irradiated nuclear material that contains fission products, requires shielded storage and handling facilities, and is in an unusable form. (5660.1)

Spent nuclear fuel

Fuel that has been withdrawn from a nuclear reactor following irradiation, but that has not been reprocessed to remove its constituent elements. (5820.2A)

Standard deviation

Spiked sample

A normal sample of material (gas, liquid, or solid) to which a known amount of some substance of interest is added. Spiked samples are used to check on the performance of a routine analysis or the recovery efficiency of an analytical method. (5400.XY)

Staging bays (In-process)

A bay(s) within an operating building used to stage explosives in excess of four hours supply. This practice is permissible as long as the bay(s) is designed to provide Class II level of protection. (6430.1A)

Standard

1: For the purposes of these guides, a standard shall be considered as a model established by law, DOE regulation, policy, custom, or general agreement against which a security system can be measured. An example might be that a vault door containing special nuclear material should have a certain delay time against a defined threat. (5632.1A); 2: A specified set of rules or conditions concerned with the class of components; delineation of procedures; definition of terms; specification of materials, performance, design, or operations; or measures of quality in describing materials, products, systems, services or practices. Standards may be specified as mandatory or reference. (5480.1B) (5480.4, Change 1); 3: A material having a known property that can be accurately established based on its physical or chemical characteristics. (5400.XY)

Standard deviation

An indication of the dispersion of a set of results around the average of samples collected or the mean of a population; it is the positive square root of the sample variance. For samples taken from a population, the standard deviation, s , is calculated as:

$$S = \sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n - 1}}$$

where \bar{X} = average value of the samples measured
 n = number of samples measured
 X_i = individual measurement value for sample i .

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Standard deviation

Standard deviation (continued)

For a finite population, the standard deviation (σ) is

$$\sigma = \sqrt{\frac{\sum_{i=1}^N (X_i - \mu)^2}{N}}$$

where μ is the mean value of the population and
 N is the number of values within the population.

(5400.XY)

Standard distribution system

1: The system by which DOE disseminates the results of its research and development program to its program managers, contractors, and others. This dissemination is controlled by the Department's standard distribution lists, maintained by the Technical Information Center in consultation with the program managers or their designated representatives. The standard distribution system is a Technical Information Center (MA-7)-managed, computerbased system designed for the distribution of unclassified and classified scientific and technical information products, production of mailing labels, and the identification of the number of copies needed to fulfill distribution requirements. (1340.1A); 2: The standard distribution system is the system by which DOE disseminates the results of its research and development program to its program managers, contractors, and others. This dissemination is controlled by the Department's standard distribution lists that are maintained and regularly updated by MA-28 in consultation with the program manager or their designated representatives. The standard distribution system is an MA-28-managed, computer-based system designed for the distribution of unclassified (DOE/TIC-4500) and classified (M-3679) scientific and technical information products, production of mailing labels, and the identification of the number of copies needed to fulfill distribution requirements. (1430.1A)

Standardization

A physical or mathematical adjustment or correction of a measurement system to make the measurements conform to predetermined values. (5400.XY)

Standard Operating Procedures (SOP)

Refers to a written document that details an operation, analysis, or action whose mechanisms are thoroughly prescribed and are commonly accepted as the method for performing certain routine or repetitive tasks. (5400.XY)

Standard Reference Material (SRM)

A material produced in quantity, of which certain properties have been certified by the National Bureau of Standards (NBS) or other agencies to the extent possible to satisfy its intended use. The material should be in a matrix similar to actual samples to be measured by a measurement system or to be used directly in preparing such a matrix. Intended uses include standardization of solutions, calibration of equipment, and auditing the accuracy and precision of measurement systems. (5400.XY)

Standard Reference Sample (SRS)

A carefully prepared material produced from or compared against a Standard Reference Material (SRM) such that there is little loss of accuracy. These samples are intended for use primarily as reference standards to determine the precision and accuracy of measurement systems, to evaluate calibration standards, and to evaluate quality control reference samples. (5400.XY)

Standards in naturally occurring matrix

Standards that relate to the composition of the sample being measured. Standards in a naturally occurring matrix include standard reference materials and standard reference samples. (5400.XY)

Standard work clothing

For evaluating closed-circuit television motion detectors, standard work clothing is the equivalent of washed denim jeans and jacket. Such clothing shall be a measure of intruder-to-background contrast. (5632.1A)

Standby

That condition in which a reactor or nuclear facility is neither operable nor declared excess, and documentary authorization exists to maintain the reactor for possible future operations. (5480.6)

Standby power

A reserve power generation or supply with switching devices that will supply power to selected loads in the event of a normal power failure. It is not required to have redundant equipment or to operate through events greater than UBC. A standby power system shall not be classified SC-1. (6430.1A)

State hazardous waste**State hazardous waste**

Waste defined as hazardous by a State. Pursuant to RCRA Section 6001, DOE is subject to and must comply with State requirements respective to solid and hazardous waste management. (5400.3)

Stateless person

One who currently is without nationality:

- (a) by the action of a state in withdrawing the protection of nationality;
- (b) by his or her own action ineffectively renouncing the nationality previously held; or
- (c) because he or she has never held nationality due to the circumstances of birth.

(1240.2A)

State license

A valid driver's license or permit issued by the States, the District of Columbia, Puerto Rico, or U.S. possession in which the employee is domiciled or principally employed. (3791.2A)

Statement of work

Describes the essential and technical requirements for items, materials, or services to be provided. (4510.1A, Change 1)

Statistical record

A record in a system of records maintained only for statistical research or reporting purposes and not used in whole or in part in making any determination about an identifiable individual, except as provided by Title 12 U.S.C. 8. (1800.1A)

Statistical sampling

A statistically valid technique used to select elements from a population, including probability sampling, simple random sampling, systematic sampling, stratified sampling and cluster sampling. (5633.3, Change 1)

Status of inventory

A reported breakdown (by process, physical, or chemical form) of the physical or book inventory of a facility at a given time. (5633.5)

Structural collapse

Stochastic effects

1: Malignant and hereditary disease for which the probability of an effect occurring, rather than its severity, is regarded as a function of dose without a threshold for radiation protection purposes. (5480.11, Change 1); 2: Biological effects, the probability, rather than the severity, of which is a function of the magnitude of the radiation dose without threshold; i.e., stochastic effects are random in nature. Nonstochastic effects are biological effects, the severity of which, in affected individuals, varies with the magnitude of the dose above a threshold value. (5400.5, Change 1)

Stockpile

Weapons and components, the custody of which has been transferred from DOE to DOD. (5610.1)

Storage

Retrievable retention of waste pending disposal. (5820.2A)

Storage area compartment

An area or series of areas that contain storage enclosures. (6430.1A)

Storage facility

Land area, structures, and equipment used for the storage of waste. (5820.2A)

Storage unit

A discrete part of the storage facility in which waste is stored. (5820.2A)

Stratified sample (stratified random sample)

Refers to sample consisting of various portions that have been obtained from identified subparts or subcategories (strata) of the total lot or population. Within each category or stratum, the samples are taken randomly. The objective of taking stratified samples is to obtain a more representative sample than might be obtained by a completely random sampling. (5400.XY)

Structural collapse

The failure of a structural component as a direct result of loss of structural integrity of the facility being subjected to various loadings. (6430.1A)

Structure

Structure

1: Any fixed real property improvement constructed on or in the land, that is not a building or utility, e.g., bridges, towers, and tanks. (4330.4); 2: Any improvement that is not a building or a utility constructed on or in the land. Examples of structures include bridges, antenna towers, tanks, fixed cranes, roads, and sidewalks. (4300.1B)

Structured interview

An interview designed to explore the individual's behavioral characteristics as they relate to his/her ability to perform assigned job tasks. While the specific questions may vary with the individual applicant and the unique background and style of the interviewer, the structured interview focuses on the critical aspects of the job tasks assigned. (5480.YY)

Student

An individual who is enrolled not less than halftime in a high school, trade school, technical or vocational institution, junior college, college, university, or other accredited educational institution. (3308.1)

Student volunteer service

Uncompensated service performed by a student, under the sponsorship of the institution at which the student is enrolled, as part of an agency program established for the purpose of providing educationally related work experience for the student. (3308.1)

Subbase

A layer of granular material located beneath the base course of a highway pavement. (6430.1A)

Subcontract

A utility services contract with the utility services supplier executed on behalf of the Department by the contractor managing the DOE facility. (4540.1B)

Subcontractor

1: For the purposes of this Order, includes any subcontractor, at any tier, that performs work under a DOE contract. (4220.4); 2: Manufacturer or supplier to a production agency or another subcontractor of major components or special designed items for the DOE. (QC-1, Rev. 5)

Subcritical flow

Open channel flow having a low velocity and a froude number less than unity, also described as tranquil or streaming flow. (6430.1A)

Subsidiary financial systems

Subgrade modulus

The slope of a load-settlement diagram constructed with data from field loading tests on the actual subgrade. (6430.1A)

Subject matter expert

An individual qualified, or previously qualified, and experienced in performing a particular task. (5480.18)

Submachine gun, closed bolt

A small caliber magazine-fed weapon that must be fired in the closed bolt position and contains a spring in the bolt to thrust the firing pin forward to detonate the primer. (5480.16, Change 2)

Submachine gun, open bolt

A small caliber magazine-fed weapon that must be fired from the open bolt position. This is a fixed firing pin against which the bolt produces the thrust necessary to detonate the primer. (5480.16, Change 2)

Subsidiary arrangements

Documents setting forth details that have been mutually agreed between the U.S. and the IAEA for implementing the agreement and protocol. Subsidiary arrangements are required by the agreement and transitional subsidiary arrangements are required by the protocol. The subsidiary arrangements include a general part applicable to those facilities in the United States identified by the IAEA for the application of safeguards in accordance with the agreement and protocol. The general part identifies the substance of communications to be made, the format of documents, procedures to be followed, and time limits for various actions. A separate facility attachment is prepared for each such facility identified by the IAEA for the application of safeguards, containing all other necessary arrangements, specified in sufficient detail to permit the IAEA to fulfill its responsibilities in an effective and efficient manner. (1270.2A)

Subsidiary financial systems

Those integrated FMSs within the SIFMS that carry out common administrative functions and includes the Departmental Payroll/Personnel System (PAY/PERS) and the Departmental Budget Formulation System (DBFS). (2200.12)

Subslab**Subslab**

Also known as a structural slab, base slab, mud slab, or wearing slab. The concrete slab below the waterproofing membrane in a double-slab configuration. (6430.1A)

Substance abuse

The use of any drug, including alcohol, to a degree characterized by the interference with a person's health, work performance, interpersonal relations, economic functioning or social standing. (3220)

Substantial construction

If determined by the cognizant DOE security personnel, classified matter shall be stored in a building or portion thereof that provides a physical barrier of the required penetration times and resistance. NBS Technical Note 837 shall be used for a comparison of the forcible penetration time through different structural barriers. (6430.1A)

Substantial loss of income

An absence from duty without available paid leave which has been, or is expected to be, at least 80 hours in duration for full-time employees on regular tours of duty or, for other employees, the average number of hours in the employee's biweekly tour of duty. (3630.2)

Suggestion

Information a field organization provides as guidance to a facility's management to identify potential program enhancements associated with survey observations. (5634.1A)

Suitable

Possessing the emotional and mental stability and physical capability necessary to perform critical duties without causing an accidental or unauthorized detonation (high explosive or nuclear). (5610.3)

Sundry collateral and special contract funds

Special funds other than insurance collateral funds, employee benefit funds, and annuity funds established pursuant to specific contractual agreements. (2200.4)

Sunk costs

Costs arising from actions taken in the past and unaffected by any subsequent decision. (5660.1)

Supplemental appropriation

Supercritical flow

Open channel flow having a high velocity and a froude number greater than unity—also described as rapid, shooting or torrential flow. (6430.1A)

Superelevation

The practice of elevating one side of a roadway over the curves in alignment. (6430.1A)

Supervisor

1: An individual officially designated by management to direct the activities of operators or fissionable materials handlers and to supervise the operation of equipment that handles, produces, processes, stores, packages, or uses radioactive material or significant quantities of fissionable materials. (5480.5);

2: An individual who has authority in the interest of the Department to hire, direct, assign, or reward, transfer, furlough, layoff, recall, suspend, discipline, or remove employees, to adjust their grievances, or to effectively recommend such action if the exercise of the authority is not merely routine or clerical in nature but requires the consistent exercise of independent judgement.

Typically, a supervisor is responsible for the direction for the direction of a staff of three or more employees. (3410.1B, Change 1)

Supervisory employee

Public Law 95-91 defines various categories of Departmental officers and employees as "supervisory" and spells out special conflict of interest provisions which apply to them. This designation covers any expert or consultant appointed under 5 United States Code 3109 for more than 90 days in any service year and compensated at a rate equal to or in excess of GS-16, Step 1. (3304.1)

Supplemental appropriation

1: An act appropriating funds in addition to those in an annual appropriation act. Supplemental appropriations provide additional budget authority beyond original estimates for programs or activities including new programs authorized after the date of the original appropriation act for which the need for funds is too urgent to be postponed until enactment of the next regular appropriation act. (5100.12) (2200.4); 2: Describes an appropriation enacted as an addition to the regular annual appropriation act. Supplemental appropriations provide additional budget authority beyond original estimates for programs or activities (including new programs authorized after the date of the original appropriation act) for which the need for funds is too urgent to be postponed until the next regular appropriation. (5100.14)

Supplemental directives

Supplemental directives

Issued by field organizations to assign local responsibilities and authorities, and prescribe procedures unique to a particular organization. See page 3, paragraph 9. (1321.1B, Change 1)

Support building

Any structure (including utilities) directly supporting explosives activities but containing no explosives. (6430.1A)

Supporting material

The additional information and material necessary to use and run the scientific and technical computer software such as documentation, (i.e., a single comprehensive report or published paper reprints, program reports, users manuals, program maintenance manuals, installation memoranda, and computer output listings), data libraries, copies of sample problems, and other machine readable media. (1360.4A)

Support service request

Comprises all the documentation required to perform and adequate review of each proposed support service contract for compliance with the policies of this Order. The contents of a support service request are specified in subparagraph 7c. (4200.3B)

Support services

Describes all services and activities required by the government to support the development and execution of assigned functions and programs. Support services do not include the exercise of discretionary authority which is the essence of a Government management function. The following activities considered support services:

- (a) **Commercial Activities** As described in OMB Circular A-76, commercial activities are ones which are operated by a Federal executive agency and which provide a product or service which could be obtained from a commercial source. Commercial activities are not Governmental functions. A commercial activity also may be part of an organization or a type of work that is separable from a Government function and is suitable for performance by contract. Examples of commercial activities are listed below. Further definition of these examples are in Attachment A to OMB Circular A-76.

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Support services (continued)

- (1) Provision of audiovisual products and services;
 - (2) automatic data processing services;
 - (3) maintenance, overhaul, repair, and testing services;
 - (4) manufacturing, fabrication, processing, and packaging;
 - (5) industrial shops and services;
 - (6) health services for Government employees;
 - (7) security services;
 - (8) office and administrative services;
 - (9) printing and reproduction services—excluding those subject to Title 44 of the U.S. Code;
 - (10) systems engineering, installation, operation, maintenance, and testing;
 - (11) transportation services;
 - (12) real property services; and
 - (13) management and fiscal support services.
- (b) **Advisory and Assistance Services** As identified in OMB Circular A-120, management and professional services, special studies and analyses, management support services, training, and consulting support services are services of a purely advisory nature relating to Government management functions, as defined in government management functions.

(4200.3B)

Surplus facility

Surplus facility

Any facility or site (including equipment) that has no identified or planned programmatic use and is contaminated with radioactivity to levels that require controlled access. (5820.2A)

Surplus property

Excess property for which screening through other Federal agencies by GSA shows no Government requirement for the property. (4300.1B)

Surveillance

The collection of information through devices and/or personnel observation to detect unauthorized movements of nuclear material, tampering with containment, falsification of information related to location and quantities of nuclear material, and tampering with safeguards devices. (5633.3, Change 1)

Surveillance and nuclear detection system

A research and development effort for developing gamma-ray and neutron detector arrays used in searching for or mapping nuclear material contamination in support of the Nuclear Emergency Search Team. (5500.1A, Change 1)

Surveying organization

The DOE safeguards and security organization which has responsibility for conducting a security and/or nuclear materials survey of a DOE facility. (5634.1A)

Systematic error

1: The deviation of the expected value of a random variable from the corresponding correct or assigned value. (5633.3, Change 1); 2: The condition in which there is a consistent deviation of the results from the actual or true values by a measurement process. The cause for the deviation, or bias, may be known or unknown; however, it is considered "assignable" (i.e., the cause can be reasonably determined). (5400.XY)

System of records

System(s) Manager

1: The official designated by DOE in a system notice published in the "Federal Register" to maintain a system of records. (1800.1A); 2: Of a financial management system is the person who has final authority to approve requirements in the financial management system or financial management system component, as listed on page V-3, paragraph 4. With the exception of the Payroll/Personnel System (PAY/PERS), this person is normally the Finance Director at Field Elements and the Controller or the Controller's designee at Headquarters for Departmental systems. The System Manager for PAY/PERS is the Headquarter's Chief of the PAY/PERS Management Group. (1000.3B)

System of records

A group of any records under the control of DOE from which information is retrieved by the name of an individual or by some identifying number, symbol, or particulars assigned to an individual. (1800.1A)

DOE ORDER DEFINITIONS

T

Tactical response force

An armed combat force trained in security protection. (6430.1A)

Tagging

A safety procedure involving labeling a defective weapon in order to identify the weapon's status (e.g., faulty, safe, requires cleaning).
(5480.16, Change 2)

Tamper-indicating

A feature to detect tampering with or unauthorized manipulation of safeguards equipment components. Includes line supervisory circuitry on data transmission lines and switches used to sense the removal of equipment cover plates. (5632.1A)

Tamper-indicating devices

Devices that may be used on containers and that, because of their uniqueness in design or structure, reveal violations of containment integrity. Tamper-indicating devices include seals, mechanisms, containers, and enclosures.
(5633.3, Change 1)

Tamper safing

The act of applying a tamper-indicating device. (5633.3, Change 1)

Targeted disabilities

Disabilities targeted for emphasis in comprehensive affirmative action programs. The disabilities and the codes that represent them on the Standard Form 256, "Self-Identification of Reportable Handicap," are as follows: deafness (16 and 17), blindness (23 through 25), missing extremities (28 and 32 through 38), partial paralysis (64 through 68), complete paralysis (71 through 78), convulsive disorders (82); mental retardation (90), mental illness (91), and distortion of limbs and/or spine (92). (3300.2)

Task

One of a series of logical steps necessary to achieve the purpose of a research, development, and demonstration procurement action. (1340.1A)

Taxing authority

Taxing authority

An entity empowered to render a separate tax bill based on the value of real property. (2100.12)

Team chief

Appointed by the head of the field organization in coordination with the project manager and the Office of Project and Facilities Management. The team chief is responsible for the review team's day-to-day activities. Typical activities include planning and scheduling the review, organizing and leading the review team, resolving identified systems discrepancies with the contractor, and preparing the review report. (2250.1C)

Technical expert

A technically trained individual with professional experience in personnel radiation dosimetry (programmatic or research) for a minimum of 5 years who may serve as a site assessor or as a member of the Oversight or Appeals Boards. Technical experts are nominated by Managers of Operations Offices and selected by the DOE Laboratory Accreditation Program Administrator. (5480.15)

Technical Information Center (MA-7)

The Department's central technical information facility responsible for developing, designing, implementing, and evaluating Department-wide systems and programs to effectively manage the scientific and technical information resulting from, or needed by, program and project managers, scientists, and engineers. This includes acquiring, collecting, processing, announcing, storing, and disseminating technical information. (1340.1A)

Technical information management program

The coordinated structure of DOE scientific and technical information functions designed to be an integral part of the Department's research and development program. This program is jointly administered by the Manager of the Office of Scientific and Technical Information (MA-28) and Heads of Departmental Elements under the overall direction and control of the Director of Administration with Assistant Secretaries having oversight and guidance responsibilities in their respective areas. (1430.1A)

Technical Surveillance Countermeasures (TSCM)

Technical safety appraisal

A documented, multidiscipline appraisal of selected Department reactors and nuclear facilities conducted by a team selected by the Deputy Assistant Secretary for Safety, Health, and Quality Assurance (EH-30). They assure proper Department-wide application of particular safety elements of the ES&H program, nuclear industry lessons learned, and appropriate licensed facility requirements as described in DOE 5482.1B, paragraph 9b. (5480.5) (5482.1B) (5480.1B) (5480.6)

Technical security

Includes technical surveillance countermeasures, communications security, and the prevention or suppression of compromising emissions and emanations. (5636.3A)

Technical specifications

A safety document approved by DOE which in a specified format defines the conditions, safety boundaries, and procedures under which activities are to be carried out at a reactor. See Code of Federal Regulations, Title 10, Part 50.36. (5480.6)

Technical surveillance

The covert installation of devices or equipment to monitor (visually or audibly) activities within a target area to acquire classified information by technical means. (5636.3A)

Technical Surveillance Countermeasures (TSCM)

1: All measures taken to prevent, detect and neutralize devices used to clandestinely monitor classified activities, for example, wiretap and eavesdrop devices. A TSCM Survey is a detailed examination by specifically trained technicians using sophisticated equipment to locate clandestine technical surveillance devices or other means by which classified activity could be monitored. (5632.1A); 2: Systematic and effective measures for the detection and nullification of technical surveillance penetrations, technical surveillance hazards, and physical security hazards. (5636.3A); 3: Those measures taken to prevent, detect, and neutralize efforts to acquire classified information by technical surveillance. (5300.4B)

Technology

Technology

Also referred to as technical data, technical skills or know-how, or as scientific and technical information. Technology is derived from basic or applied research, development, engineering, technological demonstration, economic and social research, or scientific inquiry into phenomena or technology applications. It may exist as machinery or equipment; it may be recorded, spoken, or represented in a medium for storage of communication, and may be contained in computer software with scientific and technical applications. (1240.2A)

Technology transfer

The transformation of R&D into processes, products, and services that can be applied to State and local government and private sector needs. The R&D laboratory technology transfer program emphasizes personal interaction between the technical staff of the R&D laboratories and representatives of the public and private sectors. The R&D laboratory technology transfer program includes the following activities:

- (a) assessment of R&D projects for applicability to the needs of the private sector and State and Local governments;
- (b) application and/or adaptation of research or technology into processes, products, and services for use by the private sector and State and local governments;
- (c) technical assistance to the private sector and State and local governments in adapting federally developed technology for use;
- (d) cooperation with technology transfer brokers to move technology from the laboratories to the private sector and State and local governments;
- (e) licensing of DOE-owned patented technology for commercial use.

(5800.1)

Technology transfer brokers

Any institution or organization which provides linkage between the R&D source and the public or private sector utilizing the R&D. (5800.1)

Telecommunication

Any transmission, emission, or reception of signs, signals, writings, images, and sounds or intelligence of any nature by wire, radio, visual, or other electromagnetic systems. (5500.1A, Change 1)

Teleprocessing services

Contractual services for the computation or manipulation of data in support of administrative, financial, communicative, scientific, and other similar Federal agency data processing applications. It includes teleprocessing, full service (interactive and remote batch), interactive, and remote batch processing. (1450.1C)

TEMPEST

1: An unclassified short name referring to investigations and studies of compromising emanations. It is sometimes used interchangeably with the term "compromising emanations," e.g., TEMPEST tests, TEMPEST inspections. (5300.4B) (5300.2C) (5636.3A); 2: An unclassified term for studies of compromising emanations from electronic or electromechanical equipment processing classified information. (5632.1A) (5637.1)

TEMPEST control zone

The contiguous space which surrounds the classified information processing equipment and its components that is under sufficient physical and technical control to preclude interception of compromising emanations. "Sufficient physical and technical control" means that security or other authorized personnel can exercise sufficient control over the space to prevent unauthorized persons from intercepting emissions that may be present within the zone. (5300.2C)

Temporary acquisition or temporary use

The acquisition of less than an ownership title to real property for a definite period of time related to present and foreseeable Departmental requirements for real property in support of a particular program or project. (4300.1B)

Temporary employment

Employment on programs, projects, problems, or phases thereof which require only temporary service for one year or less (full-time or part-time). (3304.1)

Temporary exemption

A short-term release from a mandatory standard of this Order. Such exemptions shall not exceed one year, except that in unusual cases a renewal may be granted, not to exceed an additional year. (5480.4, Change 1)

Temporary variance

Temporary variance

A short-term release from a DOE-prescribed OSHA standard. Such variances shall not exceed one year, except that in unusual cases a renewal may be granted, not to exceed an additional year. (5483.1A)

Tension wires

Wires placed along the top and bottom of a chain link fence to provide tension and structural rigidity. (6430.1A)

Tentative finding

Preliminary finding, and in most cases, one or more associated recommendations issued by the IG to an audited program/operation and affected Departmental Elements, for review and comment prior to incorporation as part of the official draft audit report. (2320.2A)

Terminal

Device used to control and transfer data and/or instructions to and from a central processing unit. (1360.7)

Termination liability

A contingent obligation to pay the unamortized cost of connecting facilities which are installed and owned by the utility supplier. This obligation becomes operative in the event the Department terminates the contract prior to the time required to satisfy obligation provisions of the contract. (4540.1B)

Test device

A nuclear device that contains both high explosives and special nuclear material for which the major explosive energy release is nuclear. (5633.3, Change 1)

Testing

1: A short-term evaluation of radioactive material releases that is representative of typical operations using prescribed techniques. (5400.XY);

continued on next page

Testing (continued)

2: A procedure for validating whether internal controls are operating as intended. It should include verification of the accuracy or propriety of transactions, events, or reported facts, and comparison of these with established standards or generally accepted criteria (e.g., regulations, laws, directives, good business practices, or standard operating procedures). The number of transactions, events, or reported facts being tested must be sufficient to support the conclusions. Sample size and testing techniques must be based on the nature of the program or administrative function, the risks involved, and the types of offsetting controls in place. Examples of testing include: (a) a review of documentation supporting transactions or events to determine if policies and procedures are being followed; (b) physical inventory or inspection of assets to confirm their presence and protection; (c) comparison of summary level reports with supporting detail to confirm the consistency and reliability of information provided; and (d) confirmation of information obtained during interviews with knowledgeable officials to determine compliance with laws, regulations, and management policy. (1000.3B)

Theft

1: The intentional, unauthorized removal of nuclear material to a location not authorized to contain nuclear material. (5633.3, Change 1); 2: The removal of property from Government-authorized physical boundaries without permission and contrary to law. (5630.13)

Threshold limit value-time weighted average

Concentration of toxic materials for normal 8-hour work day and a 40-hour work week to which nearly all workers may be exposed day after day without adverse effect. (5500.1A, Change 1)

Title opinion

An opinion rendered by a title insurance company or other competent authority. In the case of U.S. Government property, it is the opinion rendered by the Attorney General or designee. (4300.1B)

TNT equivalent

A measure of the blast effects from the explosion for a given quantity of material expressed in terms of the weight of TNT that would produce the same blast effects when detonated. For safety and design purposes, a reasonable value can be obtained by substituting a measurement of energy release of blast effects. (6430.1A)

Tolerance limits

Tolerance limits

Refers to a particular type of confidence limit used frequently in quality control work, where the limits apply to a percentage of the individual values of the population. (5400.XY)

Topical guidelines

Guidelines: (a) based on the general guidelines; (b) developed and issued by DP-32 or an organization having cognizance over the subject area addressed by the guidelines; (c) approved by DP-32; and (d) which are the basis for internal guidelines. (5650.3, Change 1)

Topographic map

Shows contour elevations at stated intervals along with natural features and geographic information. (4300.1B)

Top Secret

- 1: The classification level applied to information whose unauthorized disclosure could reasonably be expected to cause exceptionally grave damage to the national security; the highest classification level. (5632.1A);
- 2: The highest classification level applies to information for which unauthorized disclosure could be reasonably expected to cause exceptionally grave damage to the national security. See Classification level. (5631.4);
- 3: The classification level applied to information, the unauthorized disclosure of which could reasonably be expected to cause exceptionally grave damage to the national security. (5635.1A)

Top secret authenticating symbol

A unique symbol assigned by Director of Safeguards and Security (DP-34) to each top secret original or derivative classifier which is indicated on each newly generated top secret document classified by the top secret classifier, or on each newly received top secret document in DOE. (5635.1A)

Top secret classifier

An individual who has received specific authorization to classify information as top secret. (5635.1A)

Total costs

Operating and capital costs. (5660.1)

Total estimated cost

1: Of a construction project is the gross cost of the project, including the cost of land and land rights; engineering, design, and inspection costs; direct and indirect construction costs; and initial equipment necessary to place the plant or installation in operation. (2200.4) (5700.2C) (5100.14); 2: . . . , whether funded out of operations or plant and capital equipment appropriations. It should be noted that in recent years Congress has authorized amounts for construction projects exclusive of amounts for construction planning and design. In these cases the amount authorized is used as a base for total estimated costs, even though it does not include planning and design cost. (2200.4)

Total inventory difference

The algebraic difference between the nuclear material book inventory and a physical inventory. (5633.3, Change 1)

Total obligational authority

Available to the Department consists of all new budget authority plus the unexpired, unobligated balances brought forward from previous years for obligation; and, reimbursements authorized to be credited to a specific account or fund during the fiscal year. See Budget authority. (5100.14)

Total project cost

All generic research and development, operating, and plant and capital equipment costs specifically associated with a project. It is the sum of the total estimated cost plus all other costs identifiable to the project. Project costs are mutually exclusive; i.e., if research and development is required to complete a given project that is also supporting a second follow-on project, the cost will only be charged to the first project. If the first project should be terminated, the cumulative costs of research and development support to that point will be considered sunk costs, and all costs from that point forward would be charged to the follow-on project. In no instance should the same research and development costs be charged to more than one project. (5700.2C)

Total set-aside

The reservation of an entire acquisition or a class of acquisitions for award to small business and/or labor surplus area concerns. (4250.1)

Toxic chemicals

Toxic chemicals

Chemicals (other than radioactive chemical) which at the expected level of exposure, demonstrate the potential to induce cancer, to produce short and long term disease and/or bodily injury, to affect health adversely, to produce acute discomfort, or to endanger life of man or animal resulting from ingestion, inhalation, or absorption through any body surface. (5500.1A, Change 1)

Traceability

Refers to a documented chain of comparisons connecting a working standard (in as few steps as is practical) to a national (or international) standard, such as a standard maintained by the NBS. (5400.XY)

Tracking

System established by DOE 2300.1A for reporting on, and to monitor the progress of action taken by the Department in response to audit findings and recommendations. (2320.2A)

Traffic management

Involves all functional operations related to the procurement and management of commercial and Government-owned transportation services. Traffic management is responsible for carrier selection, preparation of shipments for the carrier, loading and unloading on the shipping platforms, tracing, expediting, rate analysis and applications, tariff controls, reconsignment, diversion, preparing and filing bills of lading, processing loss and damage claims, promoting claims prevention, assuring compliance with applicable laws and regulations, and all other operations related to the movement of shipments into and out of a facility. (1540.1)

Training accreditation program staff

An organization contracted by EH-1, responsible for developing and providing documents, training, and assistance to those who must comply with this Order. This staff also manages the conduct of the team evaluations for accreditation. (5480.18)

Training program

A planned, organized sequence of activities designed to prepare individuals to perform their jobs, to meet a specific position or classification need, and to maintain or improve their performance on the job. (5480.18)

Transfer appropriation account

Training program accreditation plan

An action plan developed following a thorough contractor self-evaluation and identification of training programs requiring accreditation. The training program accreditation plan identifies scope and resource needs for accomplishing accreditation for all programs at a facility. (5480.18)

Transactions

Any recorded change affecting the inventory data base. (5633.3, Change 1)

Transclassification

The removal of information from one classification category to another. This term is normally used to describe the removal of information from the Restricted Data category to the category of Formerly Restricted Data. (5635.1A)

Transfer

Any onsite transportation of hazardous materials. (5480.3A)

Transfer and accountability station

1: An organizational unit which controls the receipt, transmission, accountability, and disposition of classified reports. (5610.2); 2: An organizational unit which (or individual who) controls the origination, receipt, transmission, and disposition of classified scientific and technical reports, and Secret and Confidential weapon data reports. (5635.1A)

Transfer appropriation

A separate account established to receive (and subsequently obligate and expend) allocations from an appropriation of another federal entity. These accounts carry symbols identified with the original appropriation. (5100.14)

Transfer appropriation account

A separate account established to receive (and subsequently obligate and expend) allocations from another appropriation. Transfer appropriation accounts carry symbols identified with the original appropriation. Since allocations are a distribution of an appropriation (representing, in effect, the sharing of some responsibility for the program rather than a payment for goods or services to be provided), the allocations are not treated as outlays in the parent account or as receipts in the transfer appropriation account. The subsequent transactions of the transfer account are usually reported with the transactions of the parent account. (2200.4)

Transfer between appropriation accounts (appropriation transfer)

Transfer between appropriation accounts (appropriation transfer)

A transaction that, pursuant to law, withdraws budget authority or balances from one appropriation account and credits it to another appropriation account. (5100.14)

Transfer check

The act of verifying the shipping container or item count, verifying the tamper-indicating devices integrity including the identification number and comparing this information with appropriate documentation following the transfer of nuclear material. (5633.3, Change 1)

Transferred leave

Leave that has been donated by one or more employees and transferred to the annual leave account of a leave recipient. (3630.2)

Transient (re: explosive facilities)

Any person within inhabited building distance but not inside an explosives bay or other occupied areas (offices, break areas, shops, etc.). (6430.1A)

Transportation

1: The activity of moving traffic, materials, and persons from one point to another. (1540.1, Change 1); 2: The onsite or offsite activity of moving passengers and cargo from one point to another. (5480.3A)

Transportation safeguards system

The program, managed and operated by the Manager, Albuquerque Operations Office, under the programmatic direction of the Deputy Assistant Secretary for Military Application (DP-20), which has the administrative and courier personnel, special transport and escort vehicles, and nationwide high frequency communications system, required to carry out the total responsibility for the safe, secure, domestic transportation of all Departmental-owned or controlled nuclear explosives, Category I or II quantities of SNM (excluding naval reactor core shipments), and other cargos deemed appropriate and agreed to by the Manager, Albuquerque Operations Office, and respective Heads of Departmental Elements. (5632.1A)

Transportation system

The vehicles, special equipment, safe packaging, procedures, routes, handling, and trained personnel involved in or having an effect on the safety of the operation. (5610.1)

Transport index

The number placed on a package to designate the degree of control to be exercised by the carrier during transportation. The transport index to be assigned to a package of radioactive material shall be determined by either paragraph (a) or (b) below, whichever is larger. The number expressing the transport index shall be rounded up to the next higher tenth: e.g., 1.01 becomes 1.1.

- (a) The highest radiation dose rate in millirem per hour at 1 meter from any accessible external surface of the package.
- (b) The transport index of each fissile Class II package is calculated by dividing the number 50 by the number of such fissile Class II packages that may be transported together as determined under the limitations of 10 CFR 71.

(5480.3)

Transport vehicle

The conveyance (motor vehicle, railcar, aircraft, barge, or seagoing vessel) used for the transportation of property. Each cargo-carrying body (trailer, van, boxcar, freight container, barge, or ship's hold) is a separate vehicle.

(1540.1) (5480.3A)

Transuranic elements

Those elements having an atomic number greater than 92 (uranium).

(6430.1A)

Transuranic waste

Without regard to source or form, waste is contaminated with alpha-emitting transuranium radionuclides with half-lives greater than 20 years and concentrations greater than 100 nCi/g at the time of assay. Heads of Field Elements can determine that other alpha contaminated wastes, peculiar to a specific site, must be managed as transuranic waste. (5820.2A)

Transuranium radionuclide

Any radionuclide having an atomic number greater than 92. (5820.2A)

Transverse

That which is extended or is lying across. (6430.1A)

Travel authorization

Travel authorization

(a) Headquarters Elements—DOE F 1510.1B "Travel Authorization," or similar documents which authorizes official travel for Headquarters employees or contractors. (b) Field Elements—DOE F 1510.1A "Travel Authorization," or similar documents which authorized official travel for field or contractor employees. DOE F 1510.1, "Request and Authorization for Official Travel," may be used until stock is depleted. (5635.3)

Travel Management Center (TMC)

A commercial travel firm under contract to GSA that provides reservations, ticketing, and related travel management services for official Government travelers. (1500.4)

Treasury appropriation warrant

The official document issued, pursuant to law, by the Secretary of the Treasury, that establishes the amount of money authorized to be withdrawn from the Treasury for payments of obligations. (5100.11)

Treasury warrant

An official document, TFS Form 6200, "Appropriation Warrant," that is issued pursuant to law by the Secretary of the Treasury and that, by appropriation symbol, establishes the individual amounts appropriated by Congress. Treasury warrants can be issued on the basis of appropriation bills enacted by Congress or continuing resolution authority granted by Congress. (2200.4)

Treatment

Any method, technique, or process designed to change the physical or chemical character of waste to render it less hazardous, safer to transport, store or dispose of, or reduced in volume. (5820.2A)

Treatment facility

The specific area of land, structures, and equipment dedicated to waste treatment and related activities. (5820.2A)

Type B occurrence

Triage

The medical screening of patients to determine their priority for treatment; the separation of a large number of casualties in military or civilian disaster medical care into three groups:

- (a) those who cannot be expected to survive even with treatment;
- (b) those who will recover without treatment; and
- (c) the priority group of those who need treatment in order to survive.

(5480.8)

Trust funds

Funds collected and used by the Government for carrying out specific purposes and programs according to the terms of a trust agreement or statute. (5100.14)

TRU waste

Without regard to source or form, radioactive waste that at the end of institutional control periods is contaminated with alpha-emitting transuranic radionuclides with half-lives greater than 20 years and concentrations greater than 100 nCi/g. Regarding the Waste Isolation Pilot Plant, high-level waste and spent nuclear fuel, as defined by DOE 5820.2A, are specifically excluded by this definition. (6430.1A)

Two-person concept

A concept which requires a minimum of two authorized persons, each capable of detecting incorrect or unauthorized operations with respect to the task to be performed and familiar with pertinent safety and security requirements, to be present during all operations that afford access. (5610.3)

Type A occurrence

Includes the most serious Unplanned Events. The types of Unplanned Events that would result in a Type A investigation are listed in Attachment 1 to the Appendix. (RF 5000.3, Rev. 1)

Type B occurrence

The types of Unplanned Events that would result in a Type B investigation are listed in Attachment 1 to the Appendix. (RF 5000.3, Rev. 1)

Type C occurrence

Type C occurrence

Includes Unplanned Events of a lower severity than Type A or B. The types of Unplanned Events that would result in a Type C Investigation are listed in Attachment 1 to the Appendix. (RF 5000.3, Rev. 1)

DOE ORDER DEFINITIONS

U

Unacceptable damage

An incident that could result in a nuclear explosive detonation, a major environmental release from a nuclear material production reactor or the interruption of nuclear weapons production, with a significant impact on national security. (5631.6)

Unannounced inspection

An inspection that is conducted without alerting responsible management officials prior to the beginning of the inspection. (3790.1A)

Unattended openings

Doors, operable windows, hatches, louvered openings, etc., that are not attended by security guards or guarded by safety devices. (6430.1A)

Unauthorized discharge

The discharge of a firearm under circumstances other than during firearms training with the firearm properly pointed downrange (or toward a target) or the intentional firing at hostile parties when deadly force is authorized. (5480.16, Change 2)

Unauthorized disclosure

A communication or physical transfer of classified information to an unauthorized recipient. (5635.1A)

Unauthorized dissemination

The intentional or negligent transfer, in any manner, by any person, of information contained in a document or material determined by a reviewing official to contain UCNI and so marked in accordance with the procedures on page 20, paragraph 11c, to any person or entity other than an authorized individual or a person granted special access to specific UCNI under 10 CFR 1017.16(b). (5650.3, Change 1)

Uncertainty

A concept employed to describe the inability of a measurement process to measure the correct value exactly. (5633.3, Change 1)

Unclassified Controlled Nuclear Information (UCNI)

Unclassified Controlled Nuclear Information (UCNI)

1: Certain unclassified government information prohibited from public release and is defined in 10 CFR 1017. (4300.2A, Change 2); 2: Unclassified information whose unauthorized dissemination is prohibited under section 148 of the Atomic Energy Act as explained in DOE 5650.3. (5635.1A) (1240.2A); 3: . . . as determined by a controlling official under the procedures on page 6a, paragraph 7b. (5650.3, Change 1); 4: Certain unclassified government information prohibited from unauthorized dissemination under section 148 of the Atomic Energy Act of 1954, as amended. (1430.1A); 6: . . . Which concerns:

- (a) atomic energy defense programs;
- (b) which pertains to:
 - (1) the design of production facilities or utilization facilities;
 - (2) security measures (including security plans, procedures, and equipment) for the physical protection of- production or utilization facilities, Nuclear material contained in such facilities, or Nuclear material in transit or;
 - (3) the design, manufacture, or utilization of any nuclear weapon or component if the design, manufacture, or utilization of such weapon or component was contained in any information declassified or removed from the Restricted Data category by the Assistant Secretary for Defense Programs (or the head of the predecessor agency of the Department of Energy) pursuant to section 142 of the Atomic Energy Act.
- (c) whose unauthorized dissemination, as determined by a controlling official, could reasonably be expected to have a significant adverse effect on the health and safety of the public or the common defense and security by significantly increasing the likelihood of: (a) illegal production of nuclear weapons; or (b) theft, diversion, or sabotage of nuclear materials, equipment, or facilities.

(5635.4)

Unfunded cost

Unclassified telecommunications security

That domain of unclassified computer security that is concerned with protecting the point-to-point communication (e.g., input device to computer, computer to computer) of sensitive unclassified information with appropriate cost-effective measures (e.g., data encryption and protected distribution systems). Such communications generally occur via data communication systems, links, and devices such as networks, local area networks, telephone/wire lines, fiber optics, radio waves/microwaves, and integrated circuits. (1360.2A)

Undelivered orders

The amount of orders for goods and services outstanding for which the liability has not yet accrued. This amount includes any orders for goods or services for which advance payment has been made, but for which delivery or performance has not yet occurred. (2200.4)

Under construction

When the authorization for construction has been issued and authorization for operation has not yet been issued. (5480.6)

Underpinning

Permanent supports replacing or reinforcing the older supports beneath a wall or column. (6430.1A)

Undue risk

A level of identifiable risk which is unacceptable to DOE. (5480.5)

Unfilled customers' orders

The amount of orders accepted from other accounts within the Government for goods and services to be furnished on a reimbursable basis and, in the case of transactions with the public, amounts advanced or collected for which the account or fund has not yet performed the service or incurred its own obligations for that purpose. (2200.4)

Unfunded cost

A cost that does not result in an obligation or expenditure against appropriations, revolving funds, or trust funds—e.g., depreciation or employees' earned leave. (2200.4)

Unified dose assessment

Unified dose assessment

A functional capability to coordinate monitoring teams, collection of monitoring data, calculation of offsite radiation dose projections, and for the recommendation of protective actions for the plume and ingestion exposure emergency planning zones. (5500.3, Change 1)

Uninterruptible Power Supply (UPS)

A power supply that provides automatic, instantaneous power, without delay or transients, on failure of normal power of batteries or full-time operating generators. It can be designated as standby or emergency power depending on the application. Emergency installations must meet the requirements specified for emergency power. (6430.1A)

Unirradiated enriched uranium

Naturally occurring uranium enriched with U-235 above its natural abundance of approximately 0.72% (weight percent) that has not been exposed to a neutron flux. (6430.1A)

Unit hydrograph

A hydrograph with a volume of 1-inch of rainfall resulting from a storm of specified duration and areal pattern. (6430.1A)

Unit masonry

Includes: brick made of clay or shale, sand lime, and concrete; structural clay, concrete masonry units, solid load bearings, tile, load-bearing, and non-load-bearing, hollow load-bearing, and hollow non-load-bearing; natural stone and cast stone; ceramic glazed clay masonry, solid units, and hollow units; and prefaced concrete masonry units. (6430.1A)

Unpackaging room

The spaces in which receiving containers are opened and unpackaged and repackaged for storage or shipment and are surrounded by one or more secondary confinement areas. (6430.1A)

Unusable excess material

Unplanned event

Consists of any deviation from planned or expected performance in connection with any DOE or DOE-controlled operation. Such a deviation must have an actual or potential adverse consequence from an environmental protection, safety, health protection, security, safeguards, emergency preparedness, or programmatic impact standpoint. Unplanned events represent a partial or full loss of the controls that provide in-depth safety. The consequences of an unplanned event are important, but equally important is the degree of loss of control, irrespective of the consequences. Some low-consequence Unplanned Events can involve a high loss of control and indicate a need for remedial action. Unplanned events can remain as Unplanned events or can receive a higher investigation classification to Unusual, Type C, B, or A Occurrences as shown in Attachment 1. (RF 5000.3, Rev. 1)

Unreviewed Safety Question (USQ)

A proposed change, test, or experiment shall be deemed to involve an unreviewed safety question if:

- (a) the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety evaluated previously by safety analyses will be significantly increased; or
- (b) a possibility for an accident or malfunction of a different type than any evaluated previously by safety analyses will be created which could result in significant safety consequences.

(5480.1B) (5480.5) (5480.YY) (5480.6)

Unsafe or unhealthful working conditions

Situations that cause or could cause injury or illness to DOE employees in the course of their employment. (3790.1A)

Unsupported cost

A cost on which the auditor defers an opinion regarding allowability due to lack of documentation, except when the deferment is based on a limitation in the scope of the audit (unaudited cost). (2300.1A)

Unusable excess material

Excess nuclear material that is not suitable for any programmatic use in its existing form. This is a general term used to include materials such as spent fuel and scrap. (5660.1)

Unusual occurrence

Unusual occurrence

Any unplanned event that has or could adversely affect the performance, reliability, or safety of a facility or the safety of the environment or public. The types of unplanned events that would be considered unusual occurrences are listed in Attachment 1 to the Appendix. (RF 5000.3, Rev. 1)

Unusual occurrence report

A written evaluation of an unusual occurrence that is prepared in sufficient detail to enable the reviewer to assess the consequences and implications of an unplanned event. This report also contains corrective actions that will prevent a recurrence. Use the format shown in DOE Order 5000.3. (RF 5000.3, Rev. 1)

Upgrading

Raising the classification level of information, documents, or material. Also applied to the marking of a classified document or material that was initially improperly issued as unclassified. (5635.1A)

Usable excess nuclear material

Excess nuclear material that is suitable for reuse in its existing form. It consists of material in standard and/or specially prepared form. (5660.1)

Useful life

The time period in which a building element can be expected to perform effectively with proper maintenance. (6430.1A)

User

1: An organizational or programmatic entity which receives services from a data processing facility. A user may either internal or external to the department or organization responsible for the facility. (2100.8); 2: Any individual who is able to operate any equipment or implement a procedure that can access the ADP system or input commands to the ADP system or receive output from the ADP system without intervention of an authorized reviewing official. Note that a user may not necessarily be an authorized user of the ADP system. (5637.1)

User agency

For the purposes of this Order, any Government agency or contractor thereof other than DOE who utilize facilities and equipment at DOE Government-owned, contractor-operated sites. (5480.14)

User organization

The organizational or programmatic entity having the mission and function to approve or certify the accuracy and completeness of the products of the FMS. Collectively, the user organization includes all activities normally performed by that organization as well as activities of other organizations outside the user organization which must provide input to the FMS or must perform some activity related to the approval or certification of the output of the FMS. (2200.12)

U.S. Metric Board

A board established by Section 5 of the Metric Conversion Act of 1975, Public Law 94-168 (89 Stat. 1007) (15 U.S.C. 205a). (5900.2)

U.S. national

A citizen of the United States, or a person who, although not a citizen of the United States, owes permanent allegiance to the United States. (1240.2A)

U.S. Negotiating Team

A team established by the Interagency Steering Group for International Safeguards which includes one permanent member from the Department of Energy. It is chaired by the Department of State and shall include such additional participants from DOE as the DOE determines necessary. The U.S. Negotiating Team negotiates with an IAEA Negotiating Team to arrive at mutually agreed subsidiary arrangements to the agreement or protocol. (1270.2A)

Utility

1: A system, or any of its components, which generates and/or distributes (via pipelines, wires, buses, or electromagnetic waves) a commodity or service to itself and/or to other facilities. (4300.1B); 2: A system or any of its components used to generate or distribute any of the various services such as heat, electricity, sewage, gas and water. (4330.4)

Utility procurement plan

The document containing the overall strategy and requirements for fulfilling the agency's requirements for reliable and economic utility service. (4540.1B)

Utility service

A service such as the furnishing of electricity, gas, steam, water, and sewage and the furnishing of appurtenant facilities and systems. Telecommunication services or removal and disposal of garbage, rubbish, and trash are not included. (4540.1B)

DOE ORDER DEFINITIONS

V

Validation

1: The DOE review process culminating in notification by the contracting officer that the contractor has officially demonstrated compliance with the criteria. The Assistant Secretary, Management and Administration, subsequently issues a certificate of validation to the contractor and adds the contractor and contractor system to the DOE listing of validated contractors and systems. Following validation, contractor demonstration of systems operation upon award of a new contract (with the criteria requirement) may not be required. (2250.1C); 2: The process of evaluation software at the end of the entire development process to ensure compliance with software requirements. (1330) (1330.1C); 3: Refers to the confirmation that the MSSA assumptions are accurate and in agreement with DOE policy, that the agreement adequately covers all safeguards and security interests, and that their performance objectives are being attained. (5630.13)

Variability

A general term for the dispersion of values in a data set. (5400.XY)

Variance

1: A measure of the variability of samples within a subset or the entire population; it is the square of the standard deviation. Mathematically, the sample variance (σ^2) is the sum of squares of the differences between the individual values of a set and the arithmetic average of the set, divided by one less than the number of values:

$$\sigma^2 = \sum_{i=1}^n \frac{(X_i - \bar{X})^2}{n-1}$$

where	X_i	=	value of sample i
	\bar{X}	=	average of samples measured
	n	=	number of samples measured

continued on next page

Variance

Variance (continued)

For a finite population, the variance (σ^2) is the sum of squares of deviations from the arithmetic mean, divided by the number of values in the population.

$$\sigma^2 = \sum_{i=1}^n \frac{(X_i - \mu)^2}{N}$$

where μ is the mean value of the population and N is the number of values within the population. (5400.XY); 2: A release from a standard of the type specified under the Occupational Safety and Health Act which is processed in accordance with DOE 5483.1A. (5480.1B); 3: A measure of the dispersion of a set of results. (5633.3, Change 1)

Variance propagation

The determination of the value to be assigned as the uncertainty of a given quantity using mathematical formulas for the combination of errors. Variance propagation involves many considerations, and the choice of formulas for computing the uncertainty depends upon the functional relationships of the measurement parameters involved. (5633.3, Change 1)

Vault-type room

A DOE-approved room having combination-locked door(s) and protected by a Departmental-approved intrusion alarm system activated by any penetration of walls, floor, ceiling, or openings or by motion within the room. (5632.1A) (6430.1A)

Vector

An agent such as an insect, rodent, or the wind capable of mechanically or biologically transferring a pathogen from one location to another. (6430.1A)

Vehicles and equipment

All DOE-owned transportation vehicles and mobile construction, material handling, and maintenance equipment. (4330.2C)

Verifiable identification forwarding

An identification method used in networks where the sending host can verify that an authorized user on its system is attempting a connection to another host. The sending host transmits the required user authentication information to the receiving host. The receiving host can then verify that the user is validated for access to its system. This operation may be transparent to the user. (5637.1)

Verification

The process of determining whether or not the products of a given phase of the software development cycle fulfill the requirements established during the previous phase. (1330) (1330.1C)

Verification measurement

A quantitative remeasurement to verify an existing measured value as previously recorded. (5633.3, Change 1)

Verification of training and retraining

The confirmation by an auditable record of the experience, education, medical conditions, training, and testing pertinent to a candidate's specific job assignment and responsibilities. This record should satisfy all applicable requirements of paragraph 10. (5480.5)

Vessel

Every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water. (5480.14)

Vesting

The attainment, by a participant in a pension plan, of certain rights in the funds arising out of the employer's contributions made in behalf of such participant. Such rights ordinarily are granted only after certain requirements of the plan are met, such as the participant's completion of a specified number of years of service and/or attainment of a particular age. (3830.1)

Violation

1: Violations of section 148 of the Atomic Energy Act or any regulations or directive issued by, or by order of, the Secretary under that section. (5635.4);
2: Alleged, suspected, or actual criminal breach of federal laws involving a national or Departmental security interest. Such federal laws include, but are not limited.

- (a) The Atomic Energy Act of 1954, as amended (42 U.S.C. 2011781 et seq.).
- (b) The Internal Security Act of 1950, as amended (50 U.S.C. 2011 et seq.) when related to DOE activities (e.g., sections 781 and 784).

continued on next page

Violation

Violation (continued)

- (c) Title 18, U.S.C. as it pertains to:
 - (1) espionage (sections 791-798);
 - (2) sabotage (sections 2151-2156);
 - (3) treason and subversive activity (sections 238-285);
 - (4) malicious mischief (sections 1361-1363);
 - (5) actual or threatened use of explosives against persons or property (sections 841-848);
 - (6) destruction of Government property;
 - (7) embezzlement and theft (sections 641 and 6619);
 - (8) extortion and threats (sections 876-878);
 - (9) civil disorders (section 231);
 - (10) riots (section 231).
- (d) Executive Order 12356. An international breach of security procedures, or a combination of unintentional acts (infractions), which could result in a violation.

(5635.1A)

Visit

Presence of an invited foreign national at a DOE facility or at a meeting or other interaction in the U.S. sponsored by a DOE facility for 7 calendar days or less, or if in accordance with an international agreement for 2 calendar days or less. Visits are normally for the purpose of technical discussions, orientation tours, observation of projects or equipment, contract service work, or discussion of collaboration on topics of mutual interest without participation in the work of the facility, or for courtesy purposes. See definition of Assignment. (1240.2A)

Visual materials

Photographs, motion pictures, slides, article concepts, engineering drawings, plant layouts, plot plans, maps, viewgraphs, video tapes, flip charts, etc. (5635.1A)

Vital activity

Relating to integrity of a national security program or a public health and safety function. (6430.1A)

Vital area

A security area for the protection of vital equipment. (5632.1A) (6430.1A)

Vital equipment

Equipment, systems, or components whose failure or destruction would cause unacceptable interruption to a national security program or an unacceptable impact to the health and safety of the public. (5632.1A) (6430.1A)

Vital facility

A facility where vital activities occur. (6430.1A)

Vital program

A program designated vital by the program senior official. (6430.1A)

Vital records

Records essential for maintaining the continuity of Government activities during a national emergency. The Federal vital records program includes two basic categories: emergency operating records, and rights and interests records.

- (a) **Emergency operating records** Records vital to the essential functions of the Federal government for the duration of an emergency resulting from an attack on the country. These records include: those necessary for the military effort; the mobilization and protection of material and manpower resources, of services, and systems; the maintenance of public health, safety, and order; and the conduct of essential civil defense activities. These records must be available as needed at or in the vicinity of Emergency Operation Centers. Examples of emergency operating records are:
 - (1) **Variance general management records** Statements of mission; plans and programs for carrying out that mission; delegations of authority and successions of command; regulations or announcements drafted for emergency purposes; outlines of action programs; listing of vital records storage locations; listings of Department personnel, property, and activities sufficient to provide a basis for damage assessments; descriptions of essential emergency functions; and copies of basic legislation, regulations, and procedures.

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Vital records

(a) Emergency operating records (continued)

- (2) **Lists of key personnel** Includes lists of employees assigned emergency duties and lists of employees with skills useful during and subsequent to an emergency. If the lists, or other information, are retrievable by a name or individual or other personal identifier, such as social security number, the information is subject to the Privacy Act of 1974, 5 U.S.C. 552(a).
- (3) **Emergency mission records** Departmental emergency mission records, determined by the relationship of the record to the assigned essential Continuity of Government function.
- (4) **Industrial records** Engineering drawings, explanations of complex industrial processes, and lists of supplies and suppliers for items and materials not readily available.

(b) Rights and interest records Records essential to the preservation of the legal rights and interests of individual citizens and their government. These records require protection, but storage points do not have to be at or in the vicinity of Emergency Operation Centers. Examples of rights and interest records are:

- (1) **Legal rights records** Records maintained by the Federal Government as the statutory office of records, citizenship records, employee payroll and leave record, retirement records, and insurance records.
- (2) **Fiscal records** Periodic summaries of financial status and records of significant amounts of money owed the Department or contractors.
- (3) **Valuable research records** Records key to the preservation of knowledge about existing, new or developing theories, concepts, technologies and complex systems.

(5500.7A)

Vulnerability Assessment (VA)

Vulnerability Assessment (VA)

1: A risk based review of the program or administrative function to determine its susceptibility to waste, loss, mismanagement, unauthorized use, or misappropriation of resources. A vulnerability assessment consists of a review of the assessable unit's major activities, major risks, and major offsetting controls, as well as, an assessment as to whether the controls comply with the GAO Standards of Internal Control. (1000.3B); 2: A review of the susceptibility of a program or administrative function to waste, loss, mismanagement, unauthorized use, or misappropriation of resources. (2200.4); 3: A systematic evaluation process in which qualitative and/or quantitative techniques are applied to arrive at the system effectiveness level for specific targets. (5630.13)

DOE ORDER DEFINITIONS

W

Waiver

1: The cancellation, remission, forgiveness, or non-recovery of a debt allegedly owed by an employee to an agency as permitted or required by 5 U.S.C. 5584, 10 U.S.C. 2774, 32 U.S.C. 716, 5 U.S.C. 8346(b), or any other law. (2200.2A); 2: The cancellation, remission, or forgiveness of a debt allegedly owed by an employee to an agency as permitted or required by title 5, sections 5584 and 8346(b); title 10, section 2774; and title 32, section 716, of the United States Code, or any similar law. (2200.4); 3: A temporary exempt from a specified requirement. Waivers shall be valid for the minimum time necessary and shall be updated annually. A waiver request need not be submitted for deficiencies which can be corrected within 60 days of identification. However, compensatory measures must be applied pending correction. (5635.1A)

Walking

Entering and leaving the zone of detection with a normal stride. (5632.1A)

Warehousing

Holding a payment after it has been certified, to permit the payment to be made as close as possible to, but not later than, the payment due date or, if appropriate, the discount date. (2200.4)

Warning limits

Quantity limits for inventory differences which, when exceeded, require investigation and appropriate action. For processing, production, and fabrication operations, warning limits will be established with a 95 percent confidence level. See Control limits. (5633.3, Change 1)

Waste

1: A term applied to any source or SNM which is no longer useful and uneconomical or infeasible to recover, including that which has become radioactive to the extent that the material itself exhibits radioactivity of such a level that it must be handled and disposed of by special methods in order to protect the general public. (5632.1A); 2: Nuclear material residues that have been determined to be uneconomical to recover. (5633.3, Change 1)

Waste container

A receptacle for waste, including any liner or shielding material that is intended to accompany the waste in disposal. (5820.2A)

Waste management

Waste management

The planning, coordination, and direction of those functions related to generation, handling, treatment, storage, transportation, and disposal of waste, as well as associated surveillance and maintenance activities. (5820.2A)

Waste package

The waste, waste container, and any absorbent that are intended for disposal as a unit. In the case of surface contaminated, damaged, leaking, or breached waste packages, any overpack shall be considered the waste container, and the original container shall be considered part of the waste. (5820.2A)

Water hammer

Pressure rise in a pipeline caused by a sudden change in the rate of flow or stoppage of flow in the line. (6430.1A)

Weapon

A nuclear device that contains both high explosives and special nuclear material for which the major explosive energy release is nuclear. (5633.3)

Weapon complex operations offices

Include AL, NV, SR, OR for Y-12 and SAN for LLL. (5600.1)

Weapon data

1: Classified information, including Restricted Data or Formerly Restricted Data, concerning the design, manufacture, or use, including theory, development, storage, characteristics, performances and effects, of atomic weapons or components thereof, and information incorporated in or relating to nuclear explosive devices. (5632.1A); 2: Restricted data/formerly restricted data concerning the design, manufacture, or utilization (including theory, development, storage, characteristics, performance, and effects) of atomic weapons or atomic weapon components. This includes information incorporated in or relating to nuclear explosive devices. See Sigma categories. (5610.2) (5631.4) (5635.1A)

Weapon data control point

The same as the transfer/accountability (T/A) station for secret/restricted data reports except for special designation as weapon data T/A station. (5610.2)

Weapons complex

1: Includes the three weapon laboratories whose primary mission is nuclear weapon design and development: the Lawrence Livermore Laboratory (LLL), the Los Alamos Scientific Laboratory (LASL), and the Sandia Laboratories (SL); the nuclear weapon test installations; the nuclear weapon production facilities (Pantex, Kansas City, Rocky Flats, Mound Facility, Pinellas, and weapon production areas at Y-12 and the Savannah River Plant); the Savannah River Laboratory (SRL); the Albuquerque Operations Office (AL); the Nevada Operations Office (NV); the Savannah River Operations Office (SR); and those elements of the San Francisco (SAN) and Oak Ridge (OR) Operations Offices related to management of the weapon program and the weapon complex. (5600.1); 2: The DOE organizations that design, manufacture, or test nuclear weapons or nuclear weapons components. Included are Office of Military Application (DP-20), Albuquerque Operations (ALO), San Francisco Operations (SAN), Savannah River Operations (SRO), Nevada Operations (NVO), Oak Ridge Operations (ORO), their organizations, and their contractors, including subcontractors and suppliers that are concerned with nuclear weapons. (5610.2)

Weapons data report

A classified document containing weapon data:

- (a) resulting from a scientific/technical activity or concerning existing or proposed concepts relating to nuclear weapons;
- (b) normally bound, assigned a unique alphanumeric designator (report number), and formal in approach.

(5610.2)

Weapons design laboratories

Those laboratories; i.e., Sandia National Laboratories, Lawrence Livermore National Laboratory, and Los Alamos National Laboratory, which conduct nuclear weapon research, design, and development activities under the auspices of the Department of Energy. (5610.13)

Weapon simulators

Devices that simulate the function of actual weapons without emitting projectiles or detonating large explosive charges. Generally they will emit some fragments and heat, flame, or smoke and are capable of injuring personnel. (5480.16, Change 2)

Weapons, special

Weapons, special

Includes all weapons that are not normally issued to protective force personnel and includes certain firearms, land mine, booby traps, and demolition charges. (5480.16, Change 2)

Weighting Factors (WT)

Tissue-specific and represent the fraction of the total health risk resulting from uniform, whole-body irradiation that could be contributed to that particular tissue. They are used in the calculation of annual and committed effective dose equivalent to equate the risk arising from the irradiation of tissue T to the total risk when the whole body is uniformly irradiated. The weighting factors recommended by the ICRP (Publication 26) and used here are:

<u>ORGAN OR TISSUE</u>	<u>WEIGHING FACTOR</u>
Gonads	0.25
Breasts	0.15
Red Bone Marrow	0.12
Lungs	0.12
Thyroid	0.03
Bone Surfaces	0.03
Remainder ¹	0.30

¹Remainder means the five other organs with the next highest risk, including liver, kidney, spleen, thymus, adrenals, pancreas, stomach, small intestine or upper and lower large intestine, but excluding skin, lens of the eye, and extremities. The weighting factor for each such organ is 0.06. (5400.XY)

Whole-body

Refers, for radiation dose purposes, to the uniform exposure of all organs and tissues in a human body. (5400.XY)

Wiretapping

The direct or inductive coupling of an electronic device to lines transmitting communications without the knowledge of at least one of the participants. (5636.1)

Wiretapping or eavesdropping device

An electronic device designed primarily to surreptitiously intercept communications without the knowledge of at least one of the participants. (5636.1)

Word processor

A microcomputer-based electronic device that normally consists of at least a keyboard, terminal, and printer used to display, store, retrieve, manipulate, and print textual information. (1360.1A) (1360.7)

Work assignment

A group of related tasks or activities to be performed by an M&O contractor. Where possible and appropriate, a work assignment should be measurable in terms of performance and should identify verifiable events, outcomes, or deliverables that mark progress. (5700.7B, Change 2)

Work authorization form

A document that authorizes the performance of work by a specific M&O contractor (for an example, see Attachment 2). It must contain, directly or by reference to other documentation (such as program letters, program plans, or project plans), the following elements as a minimum:

- (a) a brief narrative description of what is to be done;
- (b) a statement of current fiscal year funds to be provided and a citation of the funding source;
- (c) for work assignments that have defined completion points, the total required funding estimate;
- (d) the expected period of performance;
- (e) the schedule, results, or product expected; and
- (f) the specific reporting requirements.

(5700.7B, Change 2)

Work breakdown structure

A product-oriented family tree division of real estate, hardware, software, data, and service products which organizes, defines, and displays all of the work to be performed in accomplishing the project objectives.

- (a) **Project summary work breakdown structure** A top level work breakdown structure tailored by project management to the specific project. Generally, it will identify project elements through the third level.

continued on next page

Work breakdown structure

Work breakdown structure (continued)

- (b) **Contract work breakdown structure** The complete work breakdown structure for a contract developed and used by a contractor in accordance with the contract work statement. It extends those elements of the project summary work breakdown structure for which work has been contracted to the level appropriate for the definition of the contract work.

(2250.1C)

Work environment

The surroundings in which systems operate. Includes all of the conditions that may affect one or more system components, e.g., temperature/humidity, noise, light, vibration, toxic materials, radioactive materials. (6430.1A)

Working day

A calendar day on which work is performed for 1 hour or more. (3304.1)

Working standards

1: Process items which have been frequently measured or characterized by a more accurate measurement technique and traceable to a national measurement base. (5633.3, Change 1); 2: Quality Control Reference Sample is a material used to assess the performance of a measurement system. It is intended primarily for routine intralaboratory use in maintaining control of accuracy and should be prepared from or traceable to a calibration standard. (5400.XY)

Worksheets

(a) Notes, work papers, preliminary copies of pages of a document, and additional or revised pages prior to incorporation into final copy; (b) Repetitive forms of telecommunications, worksheets additionally include manual or machine-produced page copies and carbons (clear text or encrypted), perforated and printed tapes, and magnetic tape media produced by communications centers. (5635.1A)

Writeoff

The amount of no-year authority that is withdrawn from availability for obligation by administrative action, pursuant to title 31, section 1555, of the United States Code. This excludes amounts withdrawn from expired accounts pursuant to the Act of July 25, 1956 (31 U.S.C. 1552-1554), and exceptions made by the Congress (31 U.S.C. 1557). (2200.4)

DOE ORDER DEFINITIONS

X

There are no definitions included in this section of the DOE dictionary.

DOE ORDER DEFINITIONS

Y

There are no definitions included in this section of the DOE dictionary.

DOE ORDER DEFINITIONS

Z

Zone (isolation zone)

The entire perimeter adjacent to the protected area. (5632.1A)

Zone of observation

Closed-circuit television The zones of observation for perimeter intrusion alarm assessment by closed-circuit television are those parts of the isolation zone and exterior areas of the protected area extending from the nearest points on the ground viewable by the closed-circuit television camera to the similar point on the ground viewable by an adjacent closed-circuit television camera that is pointed in the same direction or azimuth. Each zone includes the mounting and cable runs of the adjacent camera. (5632.1A)



The Rocky Flats Dictionary

**NUREG
ACRONYMS AND INITIALISMS**

A REFERENCE GUIDE

Second Edition

NUCLEAR REGULATORY (NUREG) ACRONYMS AND INITIALISMS INTRODUCTION

This section contains abbreviations (acronyms, initialisms, and other condensed forms) in alphabetical order that are used in the nuclear industry.

Guide to the Use of Abbreviations

The multitude of disciplines represented in the nuclear industry contribute heavily to the polyglot of abbreviations found throughout associated documentation. Each discipline uses its own words and produces abbreviations that may be similar to abbreviations from another discipline that are compiled from completely different words. For example, an individual referring to CTR could be discussing either a "certified test result" or a "controlled thermonuclear reactor." The critical point for any writer to remember is to spell out the complete set of words and to place the abbreviation in parentheses immediately following, and then use the abbreviation consistently. If a document is long and the term does not recur until much later, the term should be redefined as a courtesy to the reader.

Arrangement

These abbreviations are arranged in alphabetical order. Prepositions and articles are ignored in the alphabetization (P&ID is placed as if it were PID) as are punctuation marks (M/A or A-E). When two or more abbreviations are identical, the arrangement of the spelled-out form determines its placement.

Formation of Plurals

Each abbreviation is given in the singular form. For example, PWR, the abbreviation for pressurized-water reactor, can be made a plural form by adding an "s" (PWRs). No apostrophe should precede the addition. Sometimes the writer will prefer to use a singular form (ESF, engineered safety feature) as a plural (ESF, engineered safety features), and if the writer is consistent, the reader will not be confused. Singular and plural forms of words such as criterion/criteria or memorandum/memoranda are the same. For example, the form GDC refers to either general design criterion or general design criteria, depending on the specific in-text reference.

Capitalization

Spelled-out forms of the abbreviations in this section are not capitalized unless they fall into the following categories: specific facility or reactor name, companies, or organizations, and committees or special interest groups. All other words in technical documents should be treated individually as in a dictionary. Specific parts of a nuclear system or facility need not be capitalized.

NUREG ACRONYMS AND INITIALISMS

A

AA	access authorization
AACC	American Association for Contamination Control (also A ² C ²)
AAEC	Australian Atomic Energy Commission
AAECS	auxiliary area environmental control system
AAEGTS	auxiliary area emergency gas treatment system
AAM	airborne activity monitor
AAPM	American Association of Physicists in Medicine
AARR	Argonne Advanced Research Reactor (also A ² R ²)
AASHO	American Association of State Highway Officials
AATN	Asociacion Argentina de Tecnologia Nuclear
ABFS	auxiliary building filter system
ABGTS	auxiliary building gas treatment system
ABHX	air blast heat exchanger
ABI	auxiliary building isolation
ABLE	activity balance line evaluation
ABNP	Alan R. Barton Nuclear Plant
ABST	auxiliary building sump tank
ABSVS	auxiliary building special ventilation system
ABT	automatic bus transfer
ABV	auxiliary building ventilation
AC	acid concentrator
A/C	air conditioning
AC	Allis-Chalmers Manufacturing Co.
ABC	air-operated circuit breaker
ABC	Ateliers et Chantiers de Bretagne (France)
ACC	accumulator
ACCWS	auxiliary component cooling water system
ACEC	Ateliers de Constructions Electriques de Charleroi, S.A. (Belgium)
ACF	acid concentrator feed
ACF	automatic control feature
ACHP	Advisory Council on Historic Preservation
ACI	American Concrete Institute
ACI	automatic closure and interlock
ACL	alternate concentration limit
ACLP	above core load pad
ACLP	above core load plane
ACMI	Advisory Committee on Medical Uses of Isotopes
ACNGS	Allens Creek Nuclear Generating Station
ACPDS	Advisory Committee on Personal Dosimetry Services
ACPR	Annular Core Pulsed Reactor
ACR	advanced converter reactor
ACRI	Air Conditioning and Refrigeration Institute
ACRR	Annular Core Research Reactor
ACRS	Advisory Committee on Reactor Safeguards
ACS	alternate core spray
ACS	American Chemical Society
ACS	auxiliary cooling system
ACTS	automated commitment tracking system

ACU	air cleanup unit
A/D	analog to digital
ADDS	applied digital data system
ADM	Administration, Office of
ADP	automatic data processing
ADR	audit discrepancy report
ADRS	automated data retrieval system
ADS	automatic depressurization system
ADS	automatic dispatch system
ADT	aerated drain tank
ADU	ammonium diuranate
ADV	atmospheric dump valve
AE	acoustic emission
AE	air ejector
AE	architect-engineer
A-E	architect-engineer
A/E	architect-engineer
AEB	Atomic Energy Bureau (Korea)
AEB	auxiliary equipment building
AEC	Alternative Energy Coalition
AEC	Atomic Energy Commission, U.S.
AECB	Atomic Energy Control Board (Canada)
AECL	Atomic Energy of Canada Ltd.
AECM	Atomic Energy Commission Manual
AECPR	Atomic Energy Commission Procurement Regulation
AEE	Atomic Energy Establishment (Libya)
AEEN	Agenzia Europea per l'Energia Nucleare
AEEN	Agence Européenne pour l'Energie Nucléaire
AEGTS	annulus exhaust gas treatment system
AEI	Associated Electric Industries Ltd. (United Kingdom)
AEN	Agence pour l'Energie Nucléaire
AENJ	Atlantic Electric of New Jersey
AEO	Atomic Energy Organization (IRAN)
AEOD	Analysis and Evaluation of Operational Data, Office for
AEOI	Atomic Energy Organization of Iran
AEP	American Electric Power Co., Inc.
AEPSC	American Electric Power Service Corp.
AERCW	auxiliary essential raw cooling water
AERE	Atomic Energy Research Establishment (United Kingdom)
AESJ	Atomic Energy Society of Japan
AETR	Advanced Engineering Test Reactor
AETR	Advanced Epithermal Thorium Reactor
AF	auxiliary feed
AF	auxiliary feedwater
AFAS	auxiliary feedwater actuating system
AFBMA	Anti-Friction Bearing Manufacturers Association
AFC	automatic flow control
AFD	acid fractionator distillate
AFD	axial flux difference
AFL	active fuel length
AFOS	auxiliary fuel oil system
AFNE	Americans for Nuclear Energy
AF NETF	Air Force Nuclear Engineering Test Facility

AFR	acid fractionator recycle
AFR	away from reactor
AFRRRI	Armed Forces Radiobiology Research Institute
AFS	auxiliary feedwater system
AFSR	Argonne Fast Source Reactor
AFW	auxiliary feedwater
AFWAS	auxiliary feedwater actuation system
AFWC	auxiliary feedwater control
AFWS	auxiliary feedwater system
AG	Aerojet-General Corporation
AGA	automatic gas analyzer
AGC	Aerojet-General Corporation
AGL	above ground level
AGMA	American Gear Manufacturing Association
AGN	Aerojet-General Nucleonics
AGNS	Allied-General Nuclear Services
AGR	advanced gas-cooled reactor
AGS	Alternating Gradient Synchrotron
AGS	annulus gas system
AGU	American Geophysical Union
AGVC	automatic governing valve control
A/H	air handling
AHFR	Argonne High-Flux Reactor
AHM	auxiliary handling machine
AHR	aqueous homogeneous reactor
AI	Atomics International
AI	authorized inspector
AICE	American Institute of Chemical Engineers
AID	air inlet damper
AIEE	American Institute of Electrical Engineers
AIF	Atomic Industrial Forum, Inc.
AIGS	auxiliary inerting gas subsystem
AIHA	American Industrial Hygiene Association
AIHX	auxiliary intermediate heat exchanger
AIMME	American Institute of Mining and Metallurgical Engineers
AINSE	Australian Institute of Nuclear Science and Engineering
AI&O	annual inspection and overhaul
AIP	American Institute of Physics
AIRS	advanced instrumentation for reflood studies
AIS	accumulator injection system
AISC	American Institute of Steel Construction
AISE	Association of Iron and Steel Engineers
AISI	American Iron and Steel Institute
ITS	action item tracking system
AKK	Atomkraftkonsortiet (Sweden)
ALAP	as low as possible
ALAP	as low as practicable
ALAP	as low as practical
ALARA	as low as reasonably achievable
ALCP	area local control panel
ALIP	annular linear induction pump
ALKEM	Alpha Chemie und Metallurgie, G.m.b.H. (West Germany)
ALMS	auxiliary liquid metal system

ALP	assembly language preprocessor
ALPHGR	average linear planar heat generation rate
ALPR	Argonne Low Power Reactor
ALRR	Ames Laboratory Research Reactor
ALSI	aluminum silicon alloy
ALUPA	Association Luxembourgeoise pour l'Utilisation Pacifique de l'Énergie Atomique
AMAD	activity median aerodynamic diameter
AMCA	Air Moving and Conditioning Association
AMCF	alkali metal cleaning facility
AMCO	Aerojet Manufacturing Company
AMD	alpha activity median diameter
AMDEL	Australian Mineral Development Laboratories
AMI	automatic motion inhibit
AMN	Ansaldo Meccanico Nucleare, SpA (Italy)
AMPERE	Atomes et Molecules pour Études Radio-Electriques (Switzerland)
AMRR	Army Materials Research Reactor
AMS	aerial monitoring system
AMS	Army Map Service
AMSAC	ATWS (anticipated transients without scram) mitigating system actuation circuitry
AMU	aqueous makeup
AMU	atomic mass unit
A/N	alphanumeric
ANC	Aerojet Nuclear Company
ANCC	Accociazione Nazionale per il Controllo della Combustione (Italy)
ANDIN	Associazione Nazionale di Ingegneria Nucleare (Italy)
ANEC	American Nuclear Energy Council
ANF	actinide nitride fuel
ANGRY	Anti-Nuclear Group Representing York
ANI	American Nuclear Insurers
ANI	authorized nuclear inspector
ANIM	Association of Nuclear Instrument Manufacturers
ANL	Argonne National Laboratory
ANO	Arkansas Nuclear One
ANP	aircraft nuclear propulsion
ANR	Association of Neutron Radiographers
ANS	American Nuclear Society
ANSI	American National Standards Institute
AO	abnormal occurrence
AO	air operator
AOG	acid offgas
AOG	augmented offgas
AOO	anticipated operational occurrence
AOP	abnormal operating procedure
AOTA	absorber open test assembly
AOV	air-operated valve
AP	access permit
AP	access permittee
AP	administrative procedure
APA	Administrative Procedures Act

APC	argon purge cart
APC	Atomic Power Construction Ltd. (United Kingdom)
APCA	Air Pollution Control Association
APCEF	Advanced Power Conversion Experimental Facility
APCO	Alabama Power Company
APDA	Atomic Power Development Associates
APDMS	axial power distribution monitoring system
APFA	Accelerator Pulsed Fast Critical Assembly
APHA	American Public Health Association
API	absolute position indication
API	American Petroleum Institute
API	antecedent precipitation index
APL	Applied Physics Laboratory
APL	Arkansas Power & Light Co.
APLHGR	average planar heat generation rate
APPR	Army Package Power Reactor
APR	automatic pressure relief
APRF	Aberdeen Pulsed Reactor Facility
APRM	average power range monitor
APS	American Physics Society
APS	Arizona Public Service Co.
APS	atomic power station
APS	auxiliary power system
APSR	axial power shaping rod
APSRA	axial power shaping rod assembly
APTR	advanced pressure tube reactor
APU	auxiliary power unit
ARAC	atmospheric release advisory capability
ARACOR	Advanced Research and Applications Corp.
ARAVS	auxiliary and radwaste area ventilation system
ARBOR	Argonne Boiling Water Reactor
ARC	Alliance Research Center
ARD	Advanced Reactors Division
ARDA	Atomic Research and Development Authority
ARE	Aircraft Reactor Equipment
AREA	American Railway Engineering Association
Argonaut	Argonne nuclear assembly for university training
ARHCO	Atlantic Richfield Hanford Co.
ARI	alternate rod insertion
ARI	ATWS (anticipated transient without scram) rod injection
ARIS	automated reactor inspection system
ARM	area radiation monitor
ARMF	Advanced Reactivity measurement Facility
ARMS	aerial radiological measurement and survey
ARMS	aerial radiological measurements system
ARMS	area radiation monitoring system
ARMS	area radiological monitoring system
ARO	all rods out
ARP	annunciator response procedure
ARPI	absolute rod position indication
ARR	Armour Research Reactor
ARR	Association for Radiation Research (United Kingdom)
ARRS	airborne radioactivity removal system

ARS	advance record system
ARS	amplified response spectrum
ART	aerosol release and transport
ART	anticipatory reactor trip
AS	air supply
A/S	air supply
AS	auto sequential
AS	auxiliary steam
ASA	American Standards Association
ASADA	Atomic Space and Development Authority
ASCE	American Society of Civil Engineers
ASCEG	Association of South Carolina Electric and Gas Investors
ASCO	American Switch Co.
ASEP	Accident Sequence Evaluation Program
ASG	auxiliary steam generator
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
ASI	axial shape index
ASLAB	Atomic Safety and Licensing Appeal Board
ASLAP	Atomic Safety and Licensing Appeal Panel
ASLB	Atomic Safety Licensing Board
ASLBP	Atomic Safety and Licensing Board Panel
ASM	American Society for Metals
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing
ASNT	Australian School of Nuclear Technology
ASP	administrative site procedures
ASPEA	Association Suisse pour l'Énergie Atomique (Switzerland)
ASQC	American Society for Quality Control
ASR	automatic send and receive
ASS	auxiliary steam system
ASTM	American Society for Testing and Materials
ASTPO	Accident Source Term Program Office
ASTR	Aerospace Systems Test Reactor
AT	acceptance tag
AT	acceptance test
ATC	adiabatic toroidal compressor
ATEL	Aare-Tessin Ag für Elektrizität (Switzerland)
ATEN	Association Technique de L'Énergie Nucléaire (France)
ATF	acceptance test facility
ATH	artificial time history
ATOG	abnormal transient operational guideline
ATOG	anticipated transient operating guideline
ATP	acceptance test plan
ATP	acceptance test procedure
A&TP	assembly and test pit
ATR	Advanced Test Reactor
ATRC	Advanced Test Reactor Critical Facility
ATRC	advanced test reactor critical experiment
ATS	Atomtekniska Sällskapet i Finland
ATSR	Argonne Thermal Source Reactor
ATT	automatic turbine tester
ATWS	anticipated transient without scram

AUDIT	automatic unattended detection inspection transmitter
AUEA	auxiliary utility equipment area
AUXI-ATOME	Société Auxiliare pour l'Énergie Atomique (France)
AVMS	annulus vacuum maintenance system
AVR	Arbeitsgemeinschaft Versuchsreaktor, G.m.b.H. (West Germany)
AVR	automatic volume recognition
AVSS	automated vendor selection system
AVT	all-volatile treatment
AW	acid waste
AWCC	active well coincidence counter
AWG	American wire gauge
AWP	automatic withdrawal prohibit
AWRE	Atomic Weapons Research Establishment (United Kingdom)
AWS	American Welding Society
AWSF	alpha waste storage facility
AWWA	American Water Works Association
AZPS	Arizona Public Service Co.

NUREG ACRONYMS AND INITIALISMS

B

B/A	budget authority
BAC	boric acid concentrator
BACT	best available control technology
BAF	bioaccumulation factor
BAF	bottom of active fuel
BAM	Bundesanstalt für Materialprüfung (West Germany)
BAMT	boric acid mix tank
BAP	branch arm piping
BAPE	branch arm piping enclosure
BAPS	branch arm piping shielding
BARC	Bhabha Atomic Research Centre (India)
BAST	boric acid storage tank
BAT	backup auxiliary transformer
BAT	boric acid tank
BAT	boric acid transfer
BATAN	Badan Tenaga Atom Nasional (Indonesia)
BATEA	best available technology economically available
BAWTR	Babcock and Wilcox Nuclear Development Center Test Reactor
BBC	Brown Boveri et Cie (Switzerland)
BBR	Babcock-Brown Boveri Reactor, G.m.b.H. (West Germany)
BBRR	Brookhaven Beam Research Reactor
BBV	Bayrische Biologische Versuchsanstalt (West Germany)
BCD	binary coded decimal
BCL	Battelle Columbus Laboratory
BCS	Boeing Computer Services
BD	blowdown
BD/ECC	blowdown/emergency core cooling
BDHT	blowdown heat transfer
BE	binding energy
BEAR	Biological Effects of Atomic Radiation, Committee on the
BEC	beginning of equilibrium cycle
BECO	Boston Edison Co.
BEEN	Bureau d' Étude de l'Énergie Nucléaire (Belgium)
BEIR	Biological Effects of Ionizing Radiation, Committee on the
BEN	Bureau d' Études Nucléaire, S.A. (Belgium)
BEOP	British Experimental Pile Operation
BFND	Browns Ferry Nuclear Plant
BFS	Black Fox Station
BG&E	Baltimore Gas and Electric Co.
BGRR	Brookhaven Graphite Research Reactor
BGS	Bailly Generating Station
BHEC	Bangor Hydro-Electric Co.
BHS	Blue Hills Station
BIF	basic in flow
BIFEN	Banque Internationale pour le Financement de l'Énergie Nucléaire (France)
BIT	boron injection tank
BKW	Bernische Kraftwerke, A.G. (Switzerland)

BLIS	baffle/liner interface seal
BLP	basket loading pool
BLTC	bottom loading transfer cask
BM	bill of material
BMEP	brake mean effective pressure
BMEWS	ballistic missile early warning system
BMFT	Bundesminister für Forschung und Technologie (West Germany)
BMI	Battelle Memorial Institute
BML	bulk material length
BMR	Bureau of Minearal Resources (Australia)
BMRR	Brookhaven Medical Research Reactor
BMS	boron management system
BMS	boron measurement system
BN	Belgonucléaire (Belguim)
BNC	Berkeley Nucleonics Corporation
BNDC	British Nuclear Design & Construction Ltd. (United Kingdom)
BNEC	British Nuclear Energy Conference
BENS	British Nuclear Energy Society
BNFP	Barnwell Nuclear Fuel Plant
BNL	Brookhaven National Laboratory
BMP	Bellefonte Nuclear Plant
BNWL	Battelle Northwest Laboratories
B/O	budget overlay
BOC	beginning of cycle
BOC	bottom of conduit
BOD	biochemical oxygen demand
BOD	biological oxygen demand
BOEC	beginning of equilibrium cycle
BOL	beginning of life
BONUS	boiling nuclear superheat reactor
BONUS-CX	boiling nuclear superheat critical experiment
BOP	balance of plant
BOPSSAR	balance-of-plant standard safety analysis report
BORAX	Boiling Reactor Equipment
BORE	Beryllium Oxide Reactor Experiment
B&OTF	Bulletins and Orders Task Force
BPA	Bonneville Power Administration
BPFM	bypass flow module
BPHA	benzoylphenylhydroxylamine
BPID	book physical inventory difference
BPN	breakdown pulse noise
BNPL	Battelle Pacific Northwest Laboratories
BPR	beryllium physics reactor
BPR	burnable poison rod
BPRA	burnable poison rod assembly
B&PV	boiler and pressure vessel
BPVC	Boiler and Pressure Vessel Committee
BR	breeder reactor
BR	breeding ratio
B&R	Brown and Root, Inc.
B&R	Burns and Roe, Inc.

BRC	Breeder Reactor Corporation
BREDAT	Breda Termomeccanica, SpA (Italy)
BREN	Bare Reactor Experiment Nevada
BREVATOME	Société Francaise pour la Gestion des Brevets d'Application Nucléaire (France)
BRH	Bureau of Radiological Health
BRP	Bureau of Radiation Protection
BRPNP	Big Rock Point Nuclear Plant
BRR	Battelle Research Reactor
BRR	Brookhaven Research Reactor
BRS	boron recycle system
BRWM	Board on Radioactive Waste Management
B/AS	bistable
BS	Braidwood Station
BS	Byron Station
BSEP	Brunswick Steam Electric Plant
BSF	bulk shielding facility
BSI	British Standards Institution
BSL	Bignier Schmid-Laurent (France)
BSR	Bulk Shielding Reactor
BSSAR	Babcock and Wilcox Standard Safety Analysis Report
BST	bleed storage tank
BST	blowdown suppression tank
BST	boron storage tank
BT	boiling transition
BTFA	benzoyltrifluoroacetone
BTP	Branch Technical Position
BTRS	boron thermal regeneration system
BTS	Brazilian thorium sludge
BUSS	backup scram system
B&V	Black & Veatch
BVFA	Bundesversuchs und Forschungsanstalt Arsenal f(Austria)
BVPS	Beaver Valley Power Station
B&W	Babcock and Wilcox Co.
BWC	Bingham-Willamette Company
BWF	building wake factor
BWIP	Basalt Waste Isolation Program
BWR	boiling-water reactor
BWROG	Boiling Water Reactor Owners Group
BWST	borated water storage tank

NUREG ACRONYMS AND INITIALISMS

C

CA	charge amplifier
CA	chemical addition and sampling system
CA	Congressional Affairs, Office of
CA	construction authorization
C/A	corrective action
CA	critical assembly
CAC	containment atmosphere control
CACS	core auxiliary cooling system
CACW	core auxiliary cooling water
CACWS	core auxiliary cooling water system
CAD	containment atmosphere dilution
CAF	chemical analysis facility
CAFEE	critical assembly fuel element exchange
CAHE	core auxiliary heat exchanger
CALUTRON	California University Cyclotron
CAM	constant air monitor
CAM	containment atmospheric monitoring
CAM	continuous air monitor
CAMEL	component and material evaluation loop
CAMEN	Centro Autònomo Militari Energia Nucléare (Italy)
CANDU	Canadian natural-uranium, heavy-water-moderated and -cooled power reactor
CANE	Connecticut Aircraft Nuclear Experiment
CAOC	constant axial offset control
CAP	continuous audit program
CAPCO	Central Area Power Coordination Group
CAPS	cell atmosphere processing system
CAPS	construction advanced planning and sequencing
CAR	condenser air removal
CAR	configuration acceptance review
CAR	configuration acceptance review
CAR	control advisory release
CAR	corrective action report
CARA	Compagnie d'Applications et de Recherches Atomiques (France)
CARATOM	Compagnie d'Applications et de Recherches Atomiques (France)
CARS	containment atmosphere recirculation system
CAS	central alarm system
CAS	compressed air system
CASE	consolidated aerospace supplier evaluation
CAT	chemical addition tank
CAT	conditionally accepted tag
CAT	construction appraisal team
CAT	crack arrest temperature
CAVALIER	Cooperatively Assembled Virginia Low Intensity Educational Reactor
CB	containment building
CB	control building

CBAST	concentrated boric acid storage tank
CBECS	control building environmental control system
CBI	Chesapeake Bay Institute
CBI	Chicago Bridge and Iron Co.
CB&I	Chicago Bridge and Iron Co.
CBIN	Chicago Bridge and Iron Nuclear
CBL	Chesapeake Biological Laboratory
CBP	condensate booster pump
CBPC	Corn Belt Power Cooperative
CBPT	closed-loop in-reactor assembly back plug tool
CBR	commercial breeder reactor
CBSR	coupled breeding superheating reactor
CBV	containment building ventilation
CC	coarse control
CC	component check
CC	component cooling
CCAS	containment cooling actuation signal
CCB	change control board
CCB	chemical clean building
CCCS	core component conditioning station
CCCS	core components cleaning system
CCD	coarse control damper
CCD	counter-current digestion
CCF	common cause failure
CCFA	common cause failure analysis
CCHEN	Comision Chilena de Energia Nuclear (Chile)
CCM Sulzer	Compagnie de Construction Mécanique Sulzer (France)
CCN	contract change notice
CCNB	Concerned Citizens for the Nuclear Breeder
CCNPP	Calvert Cliffs Nuclear Power Plant
CCP	chemical control procedure
CCP	core component pot
CCRC	core component receiving container
CCS	commitment control system
CCS	condensate cleanup system
CCS	condensate cooling system
CCS	containment cooling system
CCSW	component cooling service water
CCTL	core component test loop
CCTV	closed-circuit television
CCU	containment cooling unit
CCW	closed cooling water
CCW	component cooling water
CCW	compound cooling water
CCW	condenser circulating water
CCW	condenser cooling water
CCW	counterclockwise
CCWS	closed cooling water system
CCWS	component cooling water system
CD	civil defense
C/D	cooldown
CDA	containment depressurization actuation
CDA	core disruptive accident

CDBA	containment design-basis accident
CDC	Center for Disease Control
CDE	condensate demineralization effluent
CDF	core damage frequency
CDF	cumulative damage function
CDP	cask decontamination pit
CDR	conceptual design requirement
CDS	cask decontamination station
CDS	component disassembly station
CDS	conceptual design study
CDS	condensate demineralization subsystem
CDV	capacitance discharge vaporization
CE	Combustion Engineering
CE	Commonwealth Edison Co.
CE	conductivity element
CE	Corps of Engineers, U.S. Army
CEA	Cambridge Electron Accelerator
CEA	Chesapeake Energy Alliance
CEA	Commissariat à l'Énergie Atomique (France)
CEA	control element assembly
CEAC	control element assembly calculator
CEAN	Centre d'Études pour les Applications de l'Énergie Nucléaire (Belgium)
CEBELCOR	Centre Belge d'Étude de la Corrosion (Belgium)
CEC	Citizens Energy Council
CEC	Commission of the European Communities
CECO	Commonwealth Edison Co.
CECO	cost estimate change order
CECS	containment environmental control system
CEDM	control element drive mechanism
CEDMCS	control element drive mechanism control system
CEDS	control element drive system
CEEA	Comision Ecuatoriana de Energia Atomica (Ecuador)
CEEA	Communauté Européenne de l'Énergie Atomique
CEER	Center for Energy and Environment Research (Puerto Rico)
CEFILAC	Compagnie du Filage des Métaux et des Joint Curty (France)
CEGB	Central Electricity Generating Board (United Kingdom)
CEHA	contact equipment handling area
CEL	carbon equilibrium loop
CEM	Compagnie Électro-Mécanique (France)
CEN	Centre d'Étude de l'Énergie Nucléaire (Belgium)
CENC	Centre d'Études Nucléaires de Cadarache (France)
CENFAR	Centre d'Études Nucléaires de Fontenay-aux-Roses (France)
CENG	Centre d'Études Nucléaires de Grenoble (France)
CENS	Centre d'Études Nucléaires de Saclay (France)
CENUSA	Centrales Nucleares, S.A. (Spain)
CENY	Consolidated Edison Co. of New York
CEPC	Central Electric Power Cooperative, Inc.
CEQ	Council on Environmental Quality
CER	complete engineering release
CER	critical experiment reactor
CERC	Costal Engineering Research Center
CERCA	Centre de Recherches pour Combustibles Atomiques (France)

CERCA	Compagnie pour l'Étude et la Réalisation de Combustibles Atomiques (France)
CERMET	ceramic and metal
CES	Critical Experiment Station
CESNEF	Centro di Studi Nucleari Enrico Fermi (Italy)
CESR	colliding electron-beam storage ring
CESSAR	Combustion Engineering Standard Safety Analysis Report
CET	critical experiment tank
CETIS	Centre Européen de Traitement de l'Information Scientifique
CETR	Consolidated Edison Thorium Reactor
CETS	control element test stand
CEVAR	consumable-electrode vacuum-arc remelt
CF	column feed
CF	confinement factor
CF	continuous flow
CF	core flooding
CFB	C.F. Braun and Co.
CFC	Constructions Ferroviaires du Centre, S.A. (Belgium)
CFCCS	condensate and feedwater chemistry control system
CFDT	Confederation Française Démocratique du Travail (France)
CFE	clandestine fission explosive
CFE	Comision Federal de Electricidad (Mexico)
CFI	core flooding system isolation valve interlock
CFM	containment failure mode
CFR	<u>Code of Federal Regulations</u>
CFR	commercial fast reactor
CFR	condensate filter demineralizer
CFRE	circulating-fuel reactor experiment
CFRMF	Coupled Fast Reactor Measurement Facility
CFS	condensate and feedwater system
CFS	core former structure
CFT	core flooding tank
CFTC	cooler flusher tank cell
CFTE	cooler flusher tank equipment
CFW	condensate and feedwater
CFWS	condensate and feedwater system
CGE	Canadian General Electric
CGEC	Cincinnati Gas and Electric Co.
CGEL	cover gas evaluation loop
CGMS	cover gas monitoring subsystem
CHAP	Composite HTGR (high temperature gas reactor) Analysis Program
CHAT	CLIRA (closed-loop in-reactor assembly) holddown assembly tool
CHCF	component handling and cleaning facility
CHF	critical heat flux
CHFR	critical heat flux ratio
CHGE	Central Hudson Gas and Electric Corp.
C&HP	chemistry and health physics
CHRS	containment heat removal system
CHU	centigrade heat unit
CHWR	cooling/hot water return
C/WR	cooling/hot water return

CI	chemical injection
CI	containment integrity
CI	containment isolation
C&I	control and instrumentation
CIA	containment isolation A
CIAS	containment isolation actuation signal
CIB	containment isolation B
CICAF	Compagnie Industrielle des Combustibles Atomiques Frites (France)
CID	component identification
CIEN	Comissão Interamericana de Energia Nuclear
CIEN	Comisión Interamericana de Energia Nuclear
CIEN	Commission Interaméricaine de l'Énergie Nucléaire
CILRT	containment integrated leak rate test
CIMI	Compagnia Italiana Montaggi Industriali, SpA (Italy)
CINDA	Computer Index of Neutron Data
C/IP	construction/inspection procedure
CIPC	Central Iowa Power Cooperative
CIR	Canada-India Reactor (India)
CIREA	Commission Interministérielle des Radioéléments Artificiels (France)
CIRGA	Critical Isotope Reactor, General Atomic Co.
CIRS	containment iodine removal system
CIS	chemical injection system
CIS	containment isolation signal
CIS	containment isolation system
CISDEN	Centrol Italiano di Studi di Diritto dell' Energia Nucleare (Italy)
CISE	Centro Informazioni Studi Esperienze, SpA (Italy)
CIT	conductivity indicator transmitter
CIV	center island vessel
CIV	combined intercept valve
CIV	combined intermediate valve
CIWA	condition identification work authorization
CL	closed loop
CL	containment leakage
CLAA	Centre Lyonnais d'Applications Atomiques (France)
CLC	closed-loop condensate
CLCGM	closed-loop cover gas monitor
CLCIS	closed-loop control and instrumentation system
CLCS	consequence limiting control system
CLCV	cold-leg check valve
CLCW	closed-loop cooling water
CLEI	Cleveland Electric Illuminating Co.
CLEM	closed-loop ex-vessel machine
CLIRA	closed-loop in-reactor assembly
CLIV	cold-leg isolation valve
CLJA	closed-loop jumper assembly
CLOF	complete loss of feedwater
CLP	Connecticut Light and Power Co.
CLRWS	clean liquid radioactive waste system
CLS	cask loading station
CLS	closed-loop system

CLSM DA	closed-loop-system meltdown accident
CMAA	Crane Manufacturers Association of America
CMC	component modification cards
CMC	core monitoring computer
CMEA	Council for Mutual Economic Assistance (U.S.S.R)
CMEP	Critical Mass Energy Project
CMF	central maintenance facility
CMF	common mode failure
CMFA	common mode failure analysis
CMFLPD	core maximum fraction of limiting power density
CMI	care and maintenance instruction
CML	Critical Mass Laboratory
CMM	core mechanical mockup
CMMF	component maintenance and mockup facility
CMP	CLEM (closed-loop ex-vessel machine) maintenance pit
CMP	configuration management plan
CMP	controlled materials production
CMPC	Central Main Power Co.
CMRG	core melt review group
CMTR	certified material test report
CNA	Canadian Nuclear Association
CNA	Centrale Nucléaire des Ardennes (Belgium)
CNB	Centrale Nucléaire Belge (Belgium)
CNC	condensation nuclei counter
CNEA	Comisión Nacional de Energía Atómica (Argentina)
CNEN	Comitato Nazionale per l'Energia Nucleare (Italy)
CNEN	Comisión Nacional de Energía Nuclear (Mexico)
CNEN	Conseil National de l'Energie Nucléaire (Luxembourg)
CNEUPEN	Commission Nationale pour l'Étude de l'Utilisation Pacifique de l'Énergie Nucléaire (Belgium)
CNFP	commercial nuclear fuel plant
CNI	Centrale Nucléaire Interescout
CNI	Consolidated National Intervenor
CNR	Committee for Nuclear Responsibility
CNRAG	company nuclear review and audit group
CNRM	Centre National de Recherches Metallurgiques (Belgium)
CNRN	Comitato Nazionale per le Ricerche Nucleare (Italy)
CNRS	Centre National de la Recherche Scientifique (France)
CNS	Catawba Nuclear Station
CNS	Cherokee Nuclear Station
CNS	Cooper Nuclear Station
CNSNS	Comisión Nacional de Seguridad Nuclear y Salvaguardias (Mexico)
CNSR	combination neutron source rod
CO	check open
CO	chief operator
COBRA	coolant boiling and rod arrays
COCORP	Consortium of Continental Reflection Profiling
COD	chemical oxygen demand
COD	crack opening displacement
COE	Corps of Engineers, U.S. Army
COFINATOME	Compagnie de Financement de l'Industrie Atomique (France)
COGAP	combustion gas analyzer program

COLSS	core operating limit supervisory system
COLSS	core operating limit support system
COM	computer output on microfilm (or microfiche)
COMET	computer-operated management evaluation technique
COMRADEX	containment and meteorology for radiation exposure
COPPS	Committee on Power Plant Siting
CORAPRO	Contrôle-Radioprotection (Belgium)
COREN	Combusitibili per Reattori Nucleari, SpA (Italy)
CP	Callaway Plant
CP	change proposal
CP	charging pump
CP	Chicago Pile
CP	cold pipe
CP	column product
CP	construction permit
CP	construction procedures
CP	containment purge
CP	coolant pump
CP	critical power
C/P	current/pneumatic
CPA	Cooperative Power Association
CPC	Consumers Power Co.
CPC	contact process cell
CPC	controlled-potential coulometer
CPC	core protection calculator
CPC	core protection computer
CPCSF	construction permit containment support fixture
CPDD	conceptual project design description
CPE	contractor performance evaluation
CPFF	cost plus fixed fee
CP&L	Carolina Power and Light Co.
CPM	critical path method
CPP	coil power programmer
CPPR	construction permit power reactor
CRP	critical power ratio
CPRR	construction permit research reactor
CPS	Clinton Power Station
CPS	condensate polishing system
CPS	containment purge system
CPSC	Consumer Product Safety Commission
CPSCI	central personnel security clearance index
CPSES	Comanche Peak Steam Electric Station
CPU	central processing unit
CPVC	chlorinated polyvinyl chloride
CQE	cognizant quality engineer
CQE	critical quality element
CR	Chicago Reactor
C-R	Codd-Rennie
CR	conditional release
CR	containment rupture
CR	control rod
CR	control room
CRA	control rod assembly

CRAC	calculations of reactor accident consequences
CRACS	control room air conditioning system
CRAVS	control room area ventilation system
CRBR	Clinch River Breeder Reactor
CRBR	controlled-recirculation boiling water reactor
CRBRP	Clinch River Breeder Reactor Plant
CRBRP	Clinch River Breeder Reactor Project
CRBRPO	Clinch River Breeder Reactor Program Office
CRC	critical reactor component
CRCPD	Conference of Radiation Control Program Directors
CRCTA	composite reactor components test activity
CRD	control rod drive
CRD	control rod driveline
CRDCS	control rod drive control system
CRDD	control rod disconnect driveline
CRDHS	control rod drive hydraulic system
CRDM	control rod drive mechanism
CRDMS	control rod drive mechanism shroud
CRDR/A	control room design review/audit
CRDS	control rod drive system
CRDVF	control rod drive ventilating fan
CRE	controlled residual element
CREDO	centralized reliability data organization
CREST	Committee on Reactor Safety and Technology
CRGR	Committee to Review Generic Requirements
CRGT	control rod guide tube
CRI	Centre de Recherches et d'Irradiations (France)
CRI	control room isolation
CRM	Centre de Recherches Métallurgiques (Belgium)
CRM	Centrum voor Research in de Metallurgie (Belgium)
CRM	certified reference material
CRM	core restraint mechanism
CRM	count rate meter
CRO	control room operator
CRP	Crystal River Plant
CRPI	control rod position indication
CRS	conductivity recording switch
CRS	containment recirculation spray
CRT	cathode-ray tube
CRTF	core restraint test facility
CRU	combined rotating unit
CRUD	Chalk River unidentified deposit
CRVICS	containment and reactor vessel isolation control system
CRWSS	condensate and refueling water storage system
CS	communications system
CS	component support
CS	containment safety
CS	containment spray
CS	core spray
CSA	chemical storage area
CSA	core special assembly
CSA	core structure accident
CSAS	containment spray actuating signal

CSB	core support barrel
CSC	containment spray cooling
CSC	core support cylinder
CSCS	core standby cooling system
CSD	cold shutdown
CSD	constant speed drive
CSDD	conceptual system design description
CSDF	core segment development facility
CSE	containment, steam explosion in
CSE	containment systems experiment
CSF	central service facility
CSF	condensate storage facility
CSF	Coulter Steel and Forge
CSHX	containment spray heat exchange
CSIS	containment spray injection system
CSN	Consejo de Seguridad Nuclear (Spain)
CSNI	Committee on the Safety of Nuclear Installation
CSOEC	Columbus and Southern Ohio Electric Co.
CSP	containment spray pump
CSR	cable spreading room
CSRS	containment spray recirculation system
CSS	cask support structure
CSS	condensate storage system
CSS	containment spray system
CSS	core support structure
CST	condensate storage tank
CSTR	continuous-stirred tank reactor
CSTS	condensate storage and transfer system
CSTS	construction and startup/turnover surveillance group
CSWS	Central and Southwest Services, Inc.
CT	cable test
CT	CLEM (closed-loop ex-vessel machine) transporter
CT	cooling tower
CTD	charged tape detection
CTF	cask tilting fixture
CTI	Cooling Tower Institute
CTL	Canatom Ltd. (Canada)
CTM	cable transfer machine
CTM	collimation test module
CTOS	cassette operations system
CTP	construction test procedure
CTP	controlled temperature profile
CTR	certified test result
CRT	controlled thermonuclear reactor
CTRM	control room
CTS	concentrate transfer system
CTS	condensate transfer and storage
CTT	cask transfer tunnel
CTVC	cable trays vertical chase
CUC	cask unloading cell
CUP	cask unloading pool
CUSP	City Utilities of Springfield
CUWS	cask unloading warm shop

CV	control valve
CVA	consecutive-valve actuation
CVC	chemical and volume control
CVCS	chemical and volume control system
CVH	containment vent header
CVI	certified vendor information
CVI	containment ventilation isolation
CVN	Charpy V-notch
CVN	construction verification notification
CVPETS	condenser vacuum pump effluent treatment system
CVPSC	Central Vermont Public Service Corp
CVPV	containment vacuum pump valve
CVTR	Carolinas-Virginia Tube Reactor
CW	circulating water
CW	cold-worked
CW	column waste
CW	cooling water
CWIP	construction work in progress
CWO	capital work order
CWP	contractor work plan
CWP	control withdrawal prohibit
CWPC	calcined waste packaging cell
CWPH	circulating water pumphouse
CWR	cooling water return
CWS	circulating water system
CWS	cooling water system
CX	column extractant
CX	criticality experiment
CY	calendar year
CYAP	Connecticut Yankee Atomic Power Co.
CYAPCO	Connecticut Yankee Atomic Power Co.

NUREG ACRONYMS AND INITIALISMS

D

DA	deaerator
DA	dose assessment
DAE	Department of Atomic Energy (India)
DAEC	Duane Arnold Energy Center
DANATOM	Danish Association for Industrial Development of Atomic Energy
DAR	design assessment report
DAS	data acquisition system
DAS	disturbance analysis system
DALF	disconnect actuating tool
DAIf	Deutsches Atomforum eV (West Germany)
DAVDS	data acquisition and visual display system
DAYP	Dairyland Power Cooperative
DB	dry bulb
DBA	design-basis accident
DBDA	design-basis depressurization accident
DBE	design-basis earthquake
DBE	design-basis event
DBF	design-basis fault
DBF	dominant bubble frequency
DBFB	deep-bed filter and blower
DBFL	design-basis flooding level
DBI	design-basis incident
DBNPS	Davis-Besse Nuclear Power Station
DBOA	delayed breeder or alternative
DBP	dibutyl phosphate
DBPB	design-basis pipe break
DBT	design-basis tornado
DC	data control
DC	design contractor
DC	drain channel
DCA	design change and authorization
DCA	Dosimeter Corporation of America
DCF	dose conversion factor
DCH	drain collection header
DCIR	daily Cadweld inspection report
DCN	design change notice
DCNP	Donald C. Cook Nuclear Power Plant
DCNPP	Diablo Canyon Nuclear Power Plant
DCR	direct conversion reactor
DCRDR	detailed control room design review
DCRN	dashpot cup retention nut
DCS	Document Control System
DCV	directional control valve
DCX	direct current experiment
D-D	deuterium-deuterium
DDD	direct distance dialing
DDH&DS	digital data handling and display system
DDR	deficiency and disposition report

DDS	digital data service
DDT	design data transmittal
DE	Detroit Edison Co.
DE	dose equivalent
DE	double-ended
DEA	driver evaluation assembly
DECLG	double-ended cold leg guillotine
DECO	Detroit Edison Co.
DEG	double-ended guillotine
DEGB	double-ended guillotine break
DEH	digital electrohydraulic
DEI	dose equivalent iodine
DEIS	draft environmental impact statement
DEMA	Diesel Engine Manufacturers Association
DEP	design external pressure
DEPS	double-ended pump suction
DER	design electrical rating
DER	double-ended rupture
DERE	Dounreay Experimental Reactor Establishment (Scotland)
DES	draft environmental statement
DESL	double-ended suction leg slot
DEW	Deutsche Edelstahlwerke, A.G. (West Germany)
DF	decontamination factor
dF	dilution factor (also Fd)
DF	dilution factor
D _f	dose factor
DF	dose factor
DFA	driver fuel assembly
DFA	dummy fuel assembly
DFC	design field change
DDFR	dynamic forcing function report
DFOS	diesel fuel oil system
DFP	diesel fire pump
DFR	Dounreay Fast Reactor (Scotland)
DFRP	downcomer flow resistance plate
DG	diesel generator
D/G	diesel generator
DG	diesel-engine generator
DGA	dummy guide assembly
DGAS	diesel generator auxiliary system
DGB	diesel generator building
DGCAIES	diesel generator combustion air intake and exhaust system
DGCWS	diesel generator cooling water system
DGFOSTS	diesel generator fuel oil storage and transfer system
DGLS	diesel generator lubrication system
DGSS	diesel generator starting system
DGZ	desired ground zero
DH	decay heat
DHHS	Department of Health and Human Services
DHI	department head instruction
DHP	department head procedure
DHR	decay heat removal

DHRS	decay heat removal system
DHRS	direct heat removal service
DHRS	direct heat removal system
DHS	decontamination hot shop
DHX	dump heat exchanger
DHXCS	dump heat exchanger control system
DIP	design internal pressure
DL	dead load
DL	Duquesne Light Co.
DLAT	discharge-line air temperature
DLL	discharge-line length
DLRWS	dirty liquid radioactive waste system
DLV	discharge-line volume
DLWL	discharge-line water-leg length
DM	demineralized
DMA	direct memory access
DMPL	Delmarva Power and Light Co.
DMT	dispersive mechanism test
DMTR	Dounreay Materials Testing Reactor (Scotland)
DMW	demineralized makeup water
DN	delayed neutron
DN	discrepancy notice
DNA	Defense Nuclear Agency
DNA	deoxyribonucleic acid
DNA	does not apply
DNB	departure from nucleate boiling
DNBR	departure from nucleate boiling ratio
DNM	delayed neutron monitor
DNMS	delayed neutron monitoring subsystem
DNPS	Dresden Nuclear Power Station
DNRC	Democritos Nuclear Research Center (Greece)
DO	designated official
DO	dissolved oxygen
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOG	dissolver off-gas
DOI	Department of Interior
DOJ	Department of Justice
DOP	detailed operating procedure
DOP	dioctyl phosphate
DOP	disaster operations plan
DOP	di-sec, octyl phthalate
DORF	Diamond Ordnance Radiation Facility
DOS	disk operations system
DOSAR	Dosimetry Applications Research Facility
DOT	Department of Transportation
DP	data processing
DP	differential pressure
D/P	differential pressure
DPC	Dairyland Power Cooperative
DPC	Duke Power Co.
DPD	decontamination as precursor to decommissioning

DPE	development project engineer
DPLC	Dayton Power and Light Co.
DPMM	dew point moisture monitor
DPP	drip pan pot
DPNS	Douglas Point Nuclear Station
DPR	demonstration power reactor
DR	Danish Reactor
DR	deficiency report
DR	discrepancy report
DRC	dropped rod control
D/RE	disassembly/reassembly equipment
DRES	direct reading emission spectrograph
DRF	dose reduction factor
DRPI	digital rod position indication
DRS	development requirements specification
DRS	disassembly/reassembly station
DRW	dirty radwaste
DS	decontamination shop
D/S	dynamic/static
DSC	design safety criterion/criteria
DSE	draft safety evaluation
DSIR	Department of Scientific and Industrial Research (United Kingdom)
DSL	drawing and specification listing
DSO	Director of Site Operations
D-T	deuterium-tritium
DTA	differential thermal analysis
DTPA	diethylenetriamine pentaacetic acid
DTR	document transmittal record
DTRF	data transmittal and routing form
DTRS	development test requirement specification
DTS	differential temperature switch
DTT	design thermal transient
DTT	design transition temperature
DTT	drag disc-turbine transducer
DUEGG	dual energy gamma group
DUN	Douglas United Nuclear
DUNC	deep underwater nuclear counting
DuP-SR	E.I. DuPont de Nemours and Company-Savannah River
DUTS	decision unit tracking system
DVM	digital volt meter
DW	dead weight
DW	demineralized water
DW	drywell
DWEDS	drywell equipment drain sump
DWFDS	drywell floor drain sump
DWG	drawing
DWICA	deep water isotopic current analyzer
DWK	Deutsche Gesellschaft für Wiederaufarbeitung von Kernbrennstoffen, m.b.H. (West Germany)
DWL	depressed water leg
DWL	drywell
DWMS	demineralized water makeup system

DWS
DWST
DWT
DYNAL

development work statement
demineralized water storage tank
drop weight test
dynamic analysis

NUREG ACRONYMS AND INITIALISMS

E

EA	enforcement action
EA	environmental assessment
E&A	errata and addenda
E/A	Errata and addenda
EAB	exclusion area boundary
EACC	Environmental Assessment Command Center
EACRP	European-American Committee on Reactor Physics
EACT	emergency action and coordination team
EAES	European Atomic Energy Society
EAL	emergency action level
EAL	equipment air lock
EAP	emergency assessment coordinator
EAP	experimental activity proposal
EAS	essential auxiliary support
EAS	experiment assurance system
EASE	elastic analysis for structural engineering
EASI	estimate of adversary sequence interruption
EAST	Eastern Utilities Associates
EB	electron beam
EBASCO	EBASCO Services Inc.
EBOR	Experimental Beryllium Oxide Reactor
EBR	Experimental Breeder Reactor
EBS	emergency broadcast system
EBTF	ECC (emergency core cooling) bypass test facility
EBWR	Experimental Boiling Water Reactor
EC	eddy current
EC	emergency coordinator
EC	European Communities
ECA	engineering change authorization
ECAR	East Central Area Reliability Coordination Agreement
ECC	emergency control center
ECC	emergency core coolant
ECC	emergency core cooling
ECCS	emergency core cooling system
ECF	emergency cooling function
ECFM	eddy current flow meter
ECI	emergency coolant injection
ECI	essential controls and instrumentation
ECN	Energieonderzoek Centrum Nederland (Netherlands)
ECN	engineering change notice
ECNG	East Central Nuclear Group, Inc.
ECNP	Environmental Coalition on Nuclear Power
ECP	engineering change proposal
ECP	estimated critical position
ECR	emergency coolant recirculation
ECR	estimate change request

ECS	emergency control station
ECS	environmental control shroud
ECS	environmental control system
ECST	emergency condensate storage tank
ECT	eddy-current test
ECT	emergency cooling tower
ECTS	electronic custom telephone set
ECTS	electronic custom telephone system
ECW	emergency cooling water
ECWP	emergency cooling water pond
ECWPH	emergency cooling water pumphouse
ED	exhaust damper
EDC	emergency decontamination center
EDCN	engineering drawing change notice
EDECWS	emergency diesel engine cooling water system
EDELS	emergency diesel engine lubrication system
EDESS	emergency diesel engine starting system
EdF	Électricité de France
EDG	emergency diesel generator
EDGCAIES	emergency diesel generator combustion air intake and exhaust system
EDM	electric discharge machining
EDM	electrical disintegration machining
EDN	engineering discrepancy notice
EDO	Executive Director for Operations, Office of
EDP	electronic data processing
EDRO	Executive Director of Regional Operations, Office of
EDS	experiment data system
EDT	energy dissipation test
EDT	equipment drain tank
EDTA	ethylenedinitrilo tetraacetic acid
EDTS	equipment drain treatment system
EEC	end of equilibrium cycle
EEC	European Economic Community
EEI	Edison Electric Institute
EEM	extrapolated endpoint method
EEPVS	electrical equipment protection room ventilation system
EERF	Eastern Environmental Radiation Facility
EESWS	emergency equipment service water system
EFAPP	Enrico Fermi Atomic Power Plant
EFAS	emergency feedwater actuation signal
EFCV	excess flow check valve
EFD	engineering flow diagram
EFDS	equipment and floor drainage system
EFFBR	Enrico Fermi Fast Breeder Power Reactor
EFI	Enrico Fermi Institute
EFNS	Educational Foundation for Nuclear Science
EFP	electric fire pump
EFPD	effective full-power day
EFPH	effective full-power hour
EFPM	effective full-power month
EFPY	effective full-power year
EFS	emergency feedwater system

EFW	emergency feedwater
EFWS	emergency feedwater system
EFWST	emergency feedwater storage tank
EG	emergency generator
EGCR	Experimental Gas-Cooled Reactor
EGTS	emergency gas treatment system
EH	electrohydraulic
EHC	electrohydraulic control
EHNP	Edwin I. Hatch Nuclear Plant
EHR	emergency heat removal
EHV	extra high voltage
EI	emergency injection
EI	engineering instruction
EIA	environmental impact appraisal
EIAP	environmental impact assessment project
EICC	emergency information and coordination center
EIP	emergency implementation procedure
EIR	Eidgenossisches Institute für Reaktorforschung (Switzerland)
EIR	engineering information request
EIR	equipment inoperable record
EIS	effluent inventory system
EIS	electrical and instrument shop
EIS	emergency injection system
EIS	environmental impact statement
EKG	effective kilogram
EL	Elettronucleare Italiana (Italy)
ELD	Executive Legal Director, Office of the
ELPHR	experimental low-temperature process heat reactor
ELT	environmental team leader
EM	electromagnetic
E/M	electromechanical
EM	elevation model
EM	environmental management
EM	evaluation model
E-MAD	Engineer-Maintenance Assembly-Disassembly
EMC	emergency management coordinator
EMC	engineering mockup critical experiment
EMI	electromagnetic interference
EMI	engineering and manufacturing instruction
EMO	electric motor operated
EMOV	electromagnetically operated valve
EMP	electromagnetic pulse
EMR	electromagnetic radiation
EMS	earthquake monitoring system
EMT	electrical metallic tubing
EMT	emergency management team
EMT	executive management team
EN	enforcement notification
ENDESA	Empresa Nacional de Electricidad, S.A. (Chili)
ENEA	European Nuclear Energy Association
ENEL	Ente Nazionale per l'Energia Elettrica (Italy)
ENI	L'Électro-Navale et Industrielle, S.A. (Belgium)
ENO	extraordinary nuclear occurrence

ENPI	Ente Nazionale Prevenzione Infortuni (Italy)
ENS	European Nuclear Society
ENS	emergency notification system
ENSA	Equipos Nucleares (Spain)
ENSI	Energia Nucleare Sud Italia (Italy)
ENUSA	Empresa Nacional del Uranio, S.A. (Spain)
ENUSA	Energie Nucléaire, S.A. (Switzerland)
EO	emergency officer
EO	Executive Order
EOC	emergency operations center
EOC	end of cycle
EOCR	Experimental Organic Cooled Reactor
EOEC	end of equilibrium cycle
EOF	emergency operations facility
EOL	end of life
EOP	emergency operating procedure
EOS	equation of state
EOY	end of year
EP	electric power
E/P	electrical-to-pneumatic
EP	emergency preparedness
EP	emergency procedure
EP	equipment piece
EPA	Environmental Protection Agency
EPDC	Electric Poser Development Co., Ltd. (Japan)
EPE	emergency preparedness evaluation
EPEC	El Paso Electric Co.
EPI	Environmental Policy Institute
EPIP	emergency plan implementing procedure
EPL	environmental protection limit
EPM	engineering procedure memorandum/memoranda
EPM	Environmental project manager
EPR	electromechanical potentiokinetic reactivation
EPR	essential performance requirement
EPRG	emergency planning review guideline
EPRI	Electric Power Research Institute
EPRTCS	emergency power ride-through capability system
EPS	electric poser system
EPSL	emergency power switching logic
EPT	ethylene-propylene terpolymer
EPZ	emergency planning zone
EQ	equipment qualification
ER	emergency response
ER	environmental report
ERA	Economic Regulatory Administration
ERA	Energy Reorganization Act.
ERA	<u>Energy Research Abstracts</u>
ERB	Experiment Review Board
ERC	emergency relocation center
ERC	Engineering Research Council
ERCOT	Electric Reliability Council of Texas
ERCW	emergency raw cooling water
ERCW	essential raw cooling water

ERDA	Energy Research and Development Administration
ERF	entrainment release factor
ERF	explosion release factor
ERFIS	emergency response facility information system
ERG	emergency response guidelines
ERIS	Emergency Response Information System
ERL	emergency reference level
ERO	engineering release order
EROS	earth resources observation system
ERP	elevated release point
ERR	Elk River Reactor
ERS	Economic Research Service
ERSP	earth resources survey program
ERT	emergency repair team
ERT	emergency response team
ERTS	environmental radiological technical specification
ERTS	environmental resources technology satellite
EPZ	emergency planning zone
ES	engineered safeguards
ES	extraction steam
ESADA	Empire States Atomic Development Associates
ESAS	engineered safeguards actuation system
ESCA	extended source calibration area
ESCO	Electrical Steel Company
ESCOM	Electricity Supply Commission (South Africa)
ESCWS	essential services cooling water system
ESD	extension shaft disconnect
ESF	engineered safety feature
ESFA	engineered safety feature actuation
ESFAS	engineered safety feature(s) actuation system
ESFS	engineered safety feature(s) system
ESFVS	engineered safety feature(s) ventilation system
ESG	Energy Systems Group
ESO	emergency support organization
E-Spec	equipment specification
ESR	early site review
ESR	electron spin resonance
ESR	experimental superheat reactor
ESRP	environmental standard review plan
ESRR	early site review report
ESS	electronic switching system
ES&S	engineering services and safety
ESS	evaporation/solidification system
ESSAR	early site safety analysis report
ESSAR	EBASCO Standard Safety Analysis Report
ESSE	EBASCO Site Support Engineering
ESSP	earliest scram set point
ESW	emergency service water
ESW	essential service water
ESWD	emergency service water discharge
ESWI	emergency service water intake
ESWS	emergency service water screening
ESWS	essential service water system

ESWSS	emergency service water supply system
ET	emergency tank
ET	executive team
ETA	equipment transfer aisle
ETC	estimated time of completion
ETEC	Energy Technology Engineering Center
ETG	electrical test group
ETP	equivalent top product
ETQAP	education and training in quality assurance practices
ETR	Engineering Test Reactor
ETS	environmental technical specifications
EUB	emergency utility building
EURATOM	European Atomic Energy Community
EV	evaporator vessel
EV	exhaust valve
EVA	early valve actuation
EVCC	ex-vessel core catcher
EVESR	ESADA (Empire States Atomic Development Associates) Vallecitos Experimental Superheat Reactor
EVFM	ex-vessel flux monitor
EVHM	ex-vessel handling machine
EVS	emergency ventilation system
EVST	ex-vessel storage tank
EVTM	ex-vessel transfer machine
EWB	Eugene Water and Electricity Board
EWST	elevated water storage tank

NUREG ACRONYMS AND INITIALISMS

F

F/A	fuel assembly
FA	fuel assembly
FA	full arc
FAA	Federal Aviation Administration
FAA	fresh acid add
FAB ISO	fabrication isometric
FAC	final acceptance criterion/criteria
FAF	Forum Atomique Francais (France)
FAI	fail as is
FAPIG	First Atomic Power Industry Group (Japan)
FAR	Fontenay-aux-Roses Nuclear Research Center (France)
FARET	fast reactor test assembly
FAS	Federation of American Scientists
FAST	fuel aerosol simulation test
FAST	fuel assembly stability test
FATT	fracture appearance transition temperature
FAX	facsimile
FBC	fluidized bed combustion
FBFC	Société Franco-Bleige de Fabrication de Combustible (France)
FBFS	fuel building filter system
FBR	fast breeder reactor
FBRF	Fast Burst Reactor Facility
FBV	fuel building ventilation
FC	fail closed
FC	fine control
FC	flow controller
FC	fuel cycle
FCA	field change authorization
FCD	fine control damper
FCD	functional control diagram
FCE	flexible critical experiment
FCI	fuel coolant interaction
FCN	field change notice
FCP	field change package
FCR	fast ceramic reactor
FCR	fast conversion ratio
FCR	field change request
FCS	Fort Calhoun Station
FCTT	fuel cladding transient tester
FCU	fan coil unit
FCV	flow control valve
Fd	dilution factor (also dF)
F/D	filter/demineralizer
F&D	finding and determination
FDA	final design acceptance
FDA	final design approval

FDA	final design authorization
FDA	Food and Drug Administration
FDAA	Federal Disaster Assistance Administration
FDA-EDRO	Food and Drug Administration, Office of Executive Director of Regional Operations
FDB	fahrenheit dry bulb
FDC	functional design criterion/criteria
FDDR	field deviation disposition request
FDI	field disposition instruction
FDM	frequency division multiplex
FDR	final design report
FDR	functional design requirement
FDT	floor drain tank
FDTs	floor drain treatment system
FDW	feedwater
FE	flow element
FEDAL	failed element detection and location instrument
FEF	fuel examination facility
FEF	fusion energy foundation
FEFP	fuel element failure propagation
FEFPL	fuel element failure propagation loop
FEIS	final environmental impact statement
FELAP	finite element analysis program
FEMA	Federal Emergency Management Agency
FEO	facility emergency organization
FERC	Federal Energy Regulatory Commission
FERD	fuel element rupture detection
FERMILAB	Fermi National Accelerator Laboratory
FES	final environmental statement
FF	filter factor
FF	fluorine facility
FFF	fuel failure fraction
FFI	full field investigation
FFLS	failed fuel location subsystem
FFM	fuel failure mockup
FHOB	fuel-handling operator booth
FFP	fuel fabrication plant
FFR	folded flow reactor
FFTF	Fast Flux Test Facility
FFTFPO	Fast Flux Test Facility Project Office
FFWT	final feedwater temperature
FG	fission gas
FGAA	Federal Government Accountants Association
FGEL	Fitchburg Gas and Electric Light Co.
FGM	fission gas monitor
FGS	Fulton Generating Station
FHB	fuel-handling building
FHBVI	fuel-handling building ventilation isolation
FH&RM	fuel-handling and radioactive maintenance
FHC	fuel-handling cell

FHE	fuel-handling equipment
FHES	fuel-handling equipment system
FHP	fuel-handling procedure
FHPC	fuel-handling and preparation cell
FHS	fuel-handling system
FHSR	final hazards summary report
FI	flow indicator
FIA	Factory Insurance Association
FIEN	Forum Italiano dell'Energia Nucleare (Italy)
FIFO	first-in first-out
FIM	field inspection manual
FIMA	fission initial metal atom
FIP	field inspection procedure
FIPS	Federal information processing standard
FIR	Food Irradiation Reactor
FIRR	Federal Institute for Reactor Research (Switzerland)
FIRS	field incident radio system
FISC	fuel inspection and sampling cell
FIST	full integral simulation test
FIT	flow indicator transmitter
FLD	fuel loading data
FLECHT	full length emergency cooling heat transfer
FLIP	floating index point
FLIT	free limiting internal truss
FM	Factory Mutual
FM	frequency multiplier
FMEA	failure modes and effects analysis
FMEF	fuels and materials examination facility
FMF	fuel melt fraction
FMIT	fusion materials irradiation test
FMS	flux monitoring system
FNB	Forum Nucléaire Belge (Belgium)
FNP	floating nuclear plant
FNR	Ford Nuclear Reactor
FO	fail open
FOA	forced oil and air
FOE	Friends of the Earth
FOGG	feed-only-good generator
FOIA	Freedom of Information Act
FOL	facility operating license
FONUBEL	Forum Nucléaire Belge (Belgium)
FORATOM	Forum Atomique Européen
FORC	fluorinator off-gas recycle compressor
FOTA	fuels open test assembly
FP	fire protection
FP	fission product
FP	full power
FPC	Federal Power Commission
FPC	fuel pool cooling
FPCC	fuel pool cooling and cleanup

FPCCS	fuel pool cooling and cleanup system
FPCSTL	fission product control screening test loop
FPD	full-power day
FPDD	final project design description
FPDI	food processing development irradiator
FPEB	fuel pool exhaust blower
FPL	Florida Power and Light Co.
FPPH	fire protection pumphouse
FPPVS	fuel pool pump ventilation system
FPR	Federal procurement regulations
FPR	flexible plastic reactor
FPS	fire protection system
FPS	Fluor Power Services, Inc.
FPSL	fission product screening loop
FPT	feedwater pump turbine
FPWT	fuel pool water treatment
FR	<u>Federal Register</u>
FR	flow regulator
FRA	flow recorder and alarm
FRAB	fuel receiving air blower
FRAF	fuel receiving air filter
FRAMATOME	Société Franco-Américaine de Constructions Atomiques (France)
FRAP	fuel rod analysis program
FRAP-S	fuel rod analysis program-steady-state
FRAP-T	fuel rod analysis program-transient
FRB	Forschungs-Reaktor Berlin (West Germany)
FRC	Federal Radiation Council
FRC	flow recorder controller
FRC	Franklin Research Center
FRCS	flow recording controller switch
FRCTF	Fast Reactor Core Test Facility
FRD	formerly restricted data
FRF	fuel reprocessing facility
FRN	<u>Federal Register</u> Notice
FRP	fuel reprocessing plant
FRS	fast reactor safety
FRS	fixed radial shield
FRS	fuel receiving station
FRSF	fuel receiving and storage facility
FRTEF	fast reactor thermal engineering facility
FS	factor or safety
FS	far side
FS	flow switch
FSAR	final safety analysis report
FSC	Federal supply classification
FSCR	fuel storage control room
FSCS	fuel storage cable spread
FSEB	fuel storage exhaust blower
FSF	fuel storage facility

FSI	fluid structure interaction
FSN	Federal stock number
FSP	fuel storage pool
FSPA	fuel storage personnel area
FSPB	fuel storage processing building
FSPPR	Fast Supercritical Pressure Power Reactor
FS&R	filing, storage, and remelt
FSS	floor service station
FSVNGS	Fort St. Vrain Nuclear Generating Station
FT	flow transmitter
FTA	fault tree analysis
FTC	Federal Telecommunications Center
FTC	fuel transfer canal
FTE	FFTF (Fast Flux Test Facility) test engineering
FTL	full-term license
FTOL	full-term operating license
FTP	FFTF(Fast Flux Test Facility) test procedure
FTP	fuel transfer pool
FTP	fuel transfer port
FTR	fast test reactor
FTR	Federal travel regulation
FTRC	Federal Telecommunication Records Center
FTRIA	flow and temperature removable instrument (ed) assembly
FTS	Federal Telecommunications System
FTS	fuel transfer system
FT&SA	fuel transfer and storage assembly
FTTM	few-tube test model
FTTS	flow-through tube sampler
FUFO	fuel fusing option
FUSE	Floridians United for Safe Energy, Inc.
FV	floor valve
FVA	floor valve adapter
FW	feedwater
FW	field weld
FW	Foster Wheeler Corp.
FWB	fahrenheit wet bulb
FWC	feedwater control
FWCI	feedwater coolant injection
FWCS	feedwater control system
FWEC	Foster Wheeler Energy Corp.
FWHM	full width half maximum
FWPB	feedwater pipe break
FWPCA	Federal Water Pollution Control Act
FWSDR	final working system design review
FWSH	fresh water supply header
FY	fiscal year
FYP	five-year plan
FZS	Forschungszentrum Seibersdorf, G.m.b.H. (Austria)

NUREG ACRONYMS AND INITIALISMS

G

GA	gas analysis
GA	General Atomic Company
GA	grapple adapter
GAAA	Groupeement pour les Activités Atomiques et Avancées (France)
GAE	general analytical evaluation
GAEC	Greek Atomic Energy Commission
GAHF	grapple adapter handling fixture
GALE	gaseous and liquid effluent
GAMAS	General Atomic material assay system
GAO	General Accounting Office
GAP	Georgia Power Co.
GAP	Government Accountability Project
GASSAR	General Atomic Standard Safety Analysis Report
GASSAR	Gilbert Associates Standard Safety Analysis Report
GBR	gas-cooled breeder reactor
GBRA	Gas-Cooled Breeder Reactor Association (Belgium)
GC	gas chromatograph
CG	General Counsel, Office of the
GCB	gravity cutback
GCBR	gas-cooled breeder reactor
GCFBR	gas-cooled fast breeder reactor
GCH	gas collection header
GCHWR	gas-cooled, heavy-water-moderated reactor
GCL	gas-cooled loop
GCNPP	Greene County Nuclear Power Plant
GCR	gas-cooled reactor
GCRA	Gas Cooled Reactor Associates
GCRE	Gas-Cooled Reactor Experiment
GDC	general design criterion/criteria
GDS	general declassification schedule
GDS	graphical display system
GDT	gas decay tank
GE	General Electric Co.
GEAP	General Electric Atomic Products
GEC	General Electric Co. (United Kingdom)
GEC	General Electrodynamics Corp.
GEIS	generic environmental impact statement
GERA	General Engineering Research and Applications (Belgium)
GES	generic environmental statement
GESMO	Generic Environmental Statement on Use of Mixed Oxide Fuel
GESSAR	General Electric Standard Safety Analysis Report
GETAB	General Electric Thermal Analysis Basis
GETR	General Electric Testing Reactor
GETSCO	General Electric Technical Services Co.
GFE	Government-furnished equipment
GFE&M	Government-furnished equipment and material
GFFD	gross failed fuel detector
GFK	Gesellschaft Für Kernforschung, m.b.H. (West Germany)
GFP	Government-furnished property

GFY	Government fiscal year
GG	generator gas
GGA	Gulf General Atomic
GGNS	Grand Gulf Nuclear Station
GH	gate house
G&H	Gibbs & Hill, Inc.
GI	gastrointestinal
GIBSSAR	Gibbs and Hill, Inc., Standard Safety Analysis Report
GIFT	gas-insulated flow tupe
GIN	Groupe Intersyndical de l'Industrie Nucléaire (France)
GKN	Gemeeneschappelijke Kernenergiecentrale Nederland N.V. (Netherlands)
GKN	Gemeinschaftskernkraftwerk Neckar, G.m.b.H. (West Germany)
GKT	Gemeinschaftskernkraftwerk Tullnerfeld, G.m.b.H. (Austria)
GKW	Gemeinschaftskernkraftwerk Weser, G.m.b.H (West Germany)
GLASS	germanium-lithium-argon scanning system
GLEEP	Graphite Low-Energy Experimental Pile (United Kingdom)
GM	Geiger-Müller
GMAW	gas metal arc weld
GMPC	Green Mountain Power Corp.
GMT	Greenwich Mean Time
GNGS	Genoa Nuclear Generating Station
GNPP	Ginna Nuclear Power Plant
GNS	Gesellschaft für Nuklear-Service, m.b.H. (West Germany)
GORX	graphite oxidation from reactor excursion
GOS	group operating service
GP	general purpose
GPCL	general purpose closed loop
GPL	general purpose loop
GPO	Government Printing Office, U.S.
GPP	general plant project
GPT	general plant telephone
GPU	General Public Utilities Corp.
GPUN	General Public Utilities Nuclear Corp.
GPUSC	General Public Utility Service Corp.
GRC	generation review committee
GRR	Greek Research Reactor
GRS	gaseous radwaste system
GRS	Gesellschaft für Reaktorsicherheit, m.b.H. (West Germany)
GRSA	General Radioquímica, S.A. (Spain)
GRT	general reactor technology
GS	gland seal
GSA	General Services Administration
GSB	general services building
GSC	gland seal condenser
GSC	gland steam condenser
GSD	generating significant dose
GSH	gas surge header
GSI	generic safety issue
GSLO	gland seal leakoff
GSPS	generating station protection system
GSR	gland steam regulator
GST	gas surge tank

GSU	generator stepup
GSU	Gulf States Utilities Co.
GTA	gas tungsten arc
GTA	guide tube assembly
GTAW	gas tungsten arc weld
GTG	gas turbine generator
GT-HTGR	gas-turbine high-temperature gas-cooled reactor
GTG	Gamma Thermometer Interest Group
GTL	gaseous tritium light
GTR	Ground Test Reactor
GTRR	Georgia Tech Research Reactor
GTTF	Gas-Turbine Test Facility
GUNFCO	Gulf United Nuclear Fuels Corporation
GV	guard vessel
GWD	gaseous waste disposal
GWMS	gaseous waste management system
GWMS	gas-water module storage
GWPS	gaseous waste processing system
GWS	gaseous waste system

NUREG ACRONYMS AND INITIALISM

H

H/A	hand/automatic
HAA	head access area
HACL	harvard Air Cleaning Laboratory
HAD	heat-activated device
HAD	heat-actuated device
HAN	hydroxylamine nitrate
HAP	hafnium column product
HAPS	Houston automatic priority spooling
HASL	Health and Safety Laboratory
HAW	hafnium column waste
HAW	high acid waste
HAX	hafnium column extractant
HAZ	heat-affected zone
HB	horizontal baffle
HBA	horizontal baffle assembly
HBPP	Humboldt Bay Power Plant
HBWR	Halden Boiling Heavy Water Reactor (Norway)
HCDA	hydrodynamic core-disruptive accident
HCDA	hypothetical core-disruptive accident
HCGS	Hope Creek Generating Station
HCLF	horizontal cask lifting fixture
HCM	hydraulic core mockup
HCS	hydrogen control system
HCSS	head compartment support structure
HCU	hydraulic control unit
HCV	hand control valve
HCV	hydraulic control valve
HDW	high-pressure demineralized water
HEARTHFIRE	High-Energy Accelerator Reactor for Thermonuclear Fusion with Ion (beam of) Relativistic Energy
HECTOR	Hot, Enriched, Carbon-Moderated, Thermal-Oscillator Reactor (United Kingdom)
HED	historical earthquake date
HED	human engineering discrepancy
HEDL	Hanford Engineering Development Laboratory
HEHF	Hanford Environmental Health Foundation
HEI	Heat Exchanger Institute
HELB	high-energy line break
HELCO	Hartford Electric Light Co.
HELP	Health and Energy Learning Project
HEM	homogeneous equilibrium model
HEPA	high-efficiency particulate air
HEPB	high-energy pipe break
HERALD	Heterogenous Experimental Reactor, Aldermaston (United Kingdom)
HERALD	High Enriched Reactor, Aldermaston (United Kingdom)
HERMES	Heavy Element and Radioactive Material Electromagnetic Separator (United Kingdom)
HERO	Hazards of Electromagnetic Radiation to Ordnance Reactor (United Kingdom)

HES	Hanford Engineering Service
HET	horizontal electrical tunnel
HETS	height equivalent to a theoretical stage
HEU	highly enriched uranium
HEW	Hamburgische Electricitäts-Werke, A.G. (West Germany)
HEX	uranium hexafluoride
HFBR	High-Flux Beam Reactor
HFCE ₂	High-Flux Critical Experiment 2
HFEF	hot fuel examination facility
HFIR	High-Flux Isotope Reactor
HFP	hot full power
HFR	High-Flux Reactor
HFT	hot functional testing
HG	hydrogen gas
HGE	hydraulic grade elevation
HGMS	high gradient magnetic separator
HG/NG	hydrogen gas/nitrogen gas
HHLR	Horace Hardy Lestor Reactor
HHS	Health and Human Services, Department of
HHSI	high-head safety injection
HHW	high-heat waste
HIC	hand indicator controller
HIC	high conversion critical
HID	high impact design
HID	high-intensity discharge
HIFAR	High-Flux Australian Reactor
HIFRENSA	Hispano-Francesa de Energia Nuclear, S.A. (Spain)
HIL	helium impurities loop
HILAC	heavy ion linear accelerator
HILC	high intermediate level cell
HIP	Hanford Isotopes Plant
HIRD	High-Intensity Radiation Development Laboratory
HKG	Hochtemperatur-Kernkraftwerk, G.m.b.H. (West Germany)
HLC	high-level cell
HLCS	high-level compaction station
HLCV	hot-leg check valve
HLIV	hot-leg isolation valve
HLLWT	high-level liquid waste tank
HLNCC	high-level neutron coincidence counter
HLO	high-level override
HLP	Houston Lighting and Power Co.
HLSW	high-level solidified waste
HLW	high-level waste
HLWC	high-level waste calcination
HLWC	high-level waste concentrate
HLWD	high-level waste distillate
HLWF	high-level waste feed
HLWOG	high-level liquid waste off-gas
HLWS	high-level waste surge
HMS	Hanford Meteorology Survey
H&N	Holmes and Narver, Inc.
HNL	Holifield National Laboratory

HNP	Haddam Neck Plant
HNP	Hartsville Nuclear Plant
HNPF	Hallam Nuclear Power Facility
HO	hydraulic operator
HOG	head end off-gas
HOP	HEDL (Hanford Engineering Development Laboratory) overpower
HOTCE	hot critical experiment
HP	health physicist
HP	health physics
HP	high pressure
HP	high purity
HPC	health physics center
HPC	hop pipe chase
HPCI	high-pressure coolant injection
HPCIS	high-pressure coolant injection system
HPCS	high-pressure core spray
HPD	high-power density
HPFL	high-performance fuels laboratory
HPFP	high-pressure fire protection
HPI	high-pressure injection
HPIS	high-pressure injection system
HPN	health physics network
HPOF	high-pressure oil fill
HPP	health physics program
HPP	hot processing plant
HPRR	Health Physics Research Reactor
HPRS	high-pressure recirculation system
HPS	Hanford Plant Standard
HPS	Health Physics Society
HPS	health physics station
HPSI	high-pressure safety injection
HPSIP	high-pressure safety injection pump
HPSW	high-pressure service water
HPSWS	high-pressure service water system
HPT	high-pressure turbine
HQ	hydro-Quebec (Canada)
HR	hydrogen recombiner
HRB	Hochtempertur-Reaktorbau, G.m.b.H. (West Germany)
HRE	Homogeneous Reactor Experiment
HRPS	hydrogen recombination and purge system
HRS	heat rejection system
HRT	homogeneous reactor test
HS	hand switch
HS	hot shop
HSO	hydrogen seal oil
HSST	heavy section steel technology
HSW	heat sink welding
HSWH	high solid waste header
HTFFT	heat transfer fluid flow thermodynamics
HTGCR	High-Temperature Gas-Cooled Reactor (United Kingdom)
HTGCR	High-Temperature Gas-Cooled Reactor (Australia)
HTGR	high-temperature gas reactor
HTGR-CX	high-temperature gas reactor critical experiment

HTIS	heat transfer instrument system
HTL	heat transfer loop
HTLTR	High-Temperature Lattice Test Reactor
HTM	high trajectory missile
HTR	Hanford Test Reactor
HTR	high-temperature reactor
HTR	Hitachi Training Reactor (Japan)
HTRDA	High-Temperature Reactor Development Associates
HTRE	Heat Transfer Reactor Experiment
HTRI	Heat Transfer Research Institute
HTS	heat transfer system
HTS	heat transport system
HTSF	high-temperature sodium facility
HTV	half thickness value
H/U	heatup
HUGHES-NEL	Hughes Aircraft Company Nuclear Electronics Laboratory
HULP	Hudson Light and Power Dept.
HUT	HEDL (Hanford Engineering Development Laboratory) up transient
HV	hand valve
H&V	heating and ventilation
HVAC	heating, ventilation, and air conditioning
HVD	heaters, vents, and drains
HVDC	high-voltage direct current
HVH	hydrogen vent header
HVSU	heating and ventilating supply unit
HW	heavy water
HW	hot water
HW	hotwell
HWCTR	Heavy-Water Components Test Reactor
HWGCR	heavy-water-moderated gas-cooled reactor
HWH	hot water heating
HWLC	hotwell level control
HWLWR	heavy-water-moderated, boiling light-water-cooled reactor
HWP	Heavy-Water Plant
HWR	heavy-water reactor
HWR	hot water return
HWS	Hanford Works Specification
HWS	Hanford Works Standard
HX	heat exchanger
HYPO	High-Power Water-Boiler Reactor
HZP	hot zero power

NUREG ACRONYMS AND INITIALISMS

IA	insertion approval
IA	instrument air
I/A	isolation amplifier
IAA	interim access authorization
IAC	interim acceptance criterion/criteria
IAD	immediate action directive
IAEA	International Atomic Energy Agency
IAEC	Israel Atomic Energy Commission
IAL	immediate action letter
IANEC	Inter-American Nuclear Energy Commission
IAP	Iowa Power
IAPMO	International Association of Plumbing and Mechanical Officials
IAS	instrument air system
IAT	information assessment team
IBA	inner blanket assembly
IBJ	Industrial Bank of Japan, Ltd.
IBJ	Instytut Badán Jadrowych (Poland)
IBSHR	Integral Boiling and Superheat Reactor
IC	indicating controller
I&C	instrumentation and control
IC	Internuclear Co.
IC	isolation condenser
ICA	item-control area
ICAR	interface control action request
ICB	interface control board
ICBWR	improved cycle boiling water reactor
ICC	inadequate core cooling
ICC	Interstate Commerce Commission
ICCU	inter-channel comparison unit
ICCW	in-containment chilled water
ICD	interface control diagram
ICD	interface control document
ICD	interface control drawing
ICES	integrated civil engineering system
ICI	ice condenser instrumentation
ICONS	Information Center on Nuclear Standards
ICP	instrument calibration procedure
ICP	inventory control point
ICRA	Interagency Committee on Radiological Assistance
ICRP	International Commission on Radiological Protection
ICRS	instrument calibration and recall system
ICRU	International Commission on Radiation Units and Measurements
ICS	instrumentation and control system
ICS	integrated control system
ICS	inter-communication system
ICSA	in-core shim assembly
ICSD	ionization chamber smoke detector

ID	inner diameter
ID	inside diameter
ID	inventory difference
IDA	intrusion detection alarm
IDCOR	Industry Degraded Core Rulemaking Program
IDEN	Instituto de Engenharia Nuclear (Brazil)
IDI	integrated design inspection
IDMS	isotope dilution mass spectrometry
IDR	independent design review
IDR	inspection discrepancy report
IDR	interface data report
IDS	interim decay storage
IDS	intermediate decay storage
IDS	isotope detection system
IDVP	independence design verification program
IE	initiating event
IE	Inspection and Enforcement, Office of
I&E	internally and externally
IE	irradiation effect
IEA	Instituto de Energia Atomica (Brazil)
IEA	International Energy Agency
IEAR	Instituto de Energia Atomica Reactor (Brazil)
IEB	Inspection and Enforcement Bulletin, Office of
IEC	International Electrotechnical Commission
IEC	Inspection and Enforcement Circular, Office of
IEEE	Institute of Electrical and Electronics Engineers
IELP	Iowa Electric Light and Power Co.
IEM	interim examination and maintenance
IEM CELL	interim examination and maintenance cell
IEMTF	interim examination and maintenance training facility
IEOTSG	integral economizer once-through steam generator
IES	Institute of Environmental Sciences
IES	irradiation effects simulation
IET	initial engine test
IFB	invitation for bids
IFCA	instrumentation to follow the course of an accident
IFCF	integrated fuel cycle facility
IFE	Institut for Engiteknikk (Norway)
IFTS	irradiated-fuel transfer system
IGA	intergranular attack
IGLD	International Great Lakes Datum
IGRP	inert gas receiving and processing
IGRPS	inert gas receiving and processing system
IGSCC	intergranular stress corrosion cracking
IGT	instrument guide tube
IHTS	intermediate heat transport system
IHX	intermediate heat exchanger
IHXGV	intermediate heat exchanger guard vessel
IIF	internals indexing fixture
IIGE	Iowa-Illinois Gas and Electric
IIRC	Incident Investigation Review Committee
IT	Illinois Institute of Technology
IT	Indian Institute of Technology

IKRD	inverse kinetics rod drop
ILC	intermediate level cell
ILIP	in-line instrument package
ILO	International Labour Organization
ILPR	Illinois Power Co.
ILRT	integrated leak rate test
ILW	intermediate-level waste
ILWC	intermediate-level waste concentrate
ILWD	intermediate-level waste distillate
ILWF	intermediate-level waste feed
ILWS	intermediate-level waste storage
M	integrated master
IMAS	impurity monitoring and analysis system
IMC	incident management center
IMCO	Inter-Government Maritime Consultative Organization
IMP	instrument maintenance procedure
IMPR	Indiana and Michigan Power Co.
IMS	in-core monitoring system
N	Informative Notice, Office of Inspection and Enforcement
INB	Internationale Natrium-Brutreaktor-Bau, G.m.b.H. (West Germany)
INC	Idaho Nuclear Corporation
INCA	in-core analysis
INCB	International Nuclear Credit Bank
INCOT	in-core test facility
INEC	Idaho Nuclear Energy Commission
INEL	Idaho Nuclear Engineering Laboratory
INER	Institute of Nuclear Energy Research (Taiwan)
INFCE	International Nuclear Fuel Cycle Evaluation
INIS	International Nuclear Information System
INITEC	Empresa Nacional de Ingeniería y Tecnología, S.A. (Spain)
INLA	International Nuclear Law Association
INMM	Institute of Nuclear Materials Management
IPO	Institute of Nuclear Power Operations
INTERATOM	Internationale Atomreaktorbau, G.m.b.H. (West Germany)
INX	ion exchange
I/O	input-output
IORV	inadvertent opening of a safety/relief valve
I&P	inerting and preheating
IP	inspection procedure
IP	International Programs, Office of
IPB	illustrated parts breakdown
IPCEA	Insulated Power Cable Engineers Association
IPDD	initial project design description
IPF	iodine protection factor
IPL	initial program load
IPP	integrated plotting package
IPR	initial pressure regulator
IPS	Indian Point Station
IPS	interim policy statement
IPS	Iowa Public Service Company
IPS	iron pipe size
IPSAR	integrated plant safety assessment report

IR	information request
IR	inspection report
IR	intermediate range
IRAC	Interdepartmental Radio Advisory Committee
IRACT	incident response action coordination team
IRAP	Interagency Radiological Assistance Program
IRB	inside reactor building
IRB	Istituto Ricerche Breda, SpA (Italy)
IRC	incident response center
IRE	Institut National des Radioéléments (Belgium)
IREF	Integrated Reliability Evaluation Program
IRFM	integral reactor flow model
IRG	Interagency Review Group
IRM	intermediate range monitor
IRN	item removal notice
IRP	intermediate rotating plug
IRPA	International Radiation Protection Association (France)
IRPI	individual rod position indicator
IRR	Institute for Reactor Research (Switzerland)
IRR	Israeli Research Reactor
IRS	inquiry and reporting system
IRS	Institut für Reaktorsicherheit der Technischen Überwachungs- Vereine, e.V. (West Germany)
IRS	iodine removal system
IRVH	integrated reactor vessel head
IS	indicating switch
ISA	Instrument Society of America
ISAF	isotopic source adjustable fissionometer
ISAM	indexed sequential access method
ISAP	Integrated Safety Assessment Program
ISAS	isotopic source assay system
ISCA	Intersociety Committee on Methods for Ambient Air Sampling
ISCP	intermediate sodium characterization package
ISCT	inner seal collar tool
ISDF	intermediate sodium disposal facility
ISEG	independent safety engineering group
ISER	integral systems experimental requirement
ISFSI	independent spent fuel storage installation
ISI	inservice inspection
ISIS	integrated safeguards information system
ISMES	Istituto Sperimentale Modelli e Strutture (Italy)
ISO	International Standardization Organization
ISO/DWG	isometric drawing
ISP	industrial security plan
ISR	intermediate sodium removal
IST	integral simulation test
I&T	inspection and test
IT	instrument test
IT	instrument tree
ITAL	Instituut voor Toepassing van Atoomenergie in de Landbouw (Netherlands)
IT&AP	inspection test and analysis plan
ITF	interstitial transfer facility

ITFTRIA	instrument tree flow and temperature removal instrument assembly
ITRI	Industrial Technology Research Institute (Taiwan)
IT	inspection/test instruction
ITMA	irradiation test management activity
ITMS	incore temperature monitoring system
ITR	instrument test rig
ITRIA	instrument tree removable instrument assembly
ITS	Idaho Test Station
IT/SP	instrument tree/spool piece
ITV	intermediate test vessel
IUINS	Institut Interuniversitaire des Sciences Nucléaires (Belgium)
IUPAC	International Union of Pure and Applied Chemistry
IUPAP	International Union of Pure and Applied Physics
IVHM	in-vessel handling machine
IVHM-EM	in-vessel handling machine-engineering model
IVHX	in-vessel heat exchanger
IVIC	Instituto Venezolano de Investigaciones Científicas (Venezuela)
IVO	Imatran Voima Osakeyhtio (Finland)
IVS	in-vessel storage
IVSM	in-vessel storage module
IVTM	in-vessel transfer machine
IWFS	industrial waste filtration system
IWGFR	International Working Group on Fast (Breeder) Reactors
IWRC	iron wire rope core
IWS/IT	integrated work sequence/inspection traveler
IWTS	industrial waste treatment system
IX	ion exchanger
IZ	isolation zone

NUREG ACRONYMS AND INITIALISMS

J

JABE	John A. Blume and Associates, Engineers
JAEC	Japan Atomic Energy Commission
JAEIP	Japan Atomic Energy Insurance Pool
JAERI	Japan Atomic Energy Research Institute
JAERO	Japan Atomic Energy Relations Organization
JAIF	Japan Atomic Industrial Forum
JAJ	J.A. Jones Company
JAPC	Japan Atomic Power Co.
JARRP	Japan Association for Radiation Research on Polymers
JCAE	Joint Committee on Atomic Energy
JCL	job control language
JCO	justification for continued operation
JCPL	Jersey Central Power and Light Co.
JCP&L	Jersey Central Power and Light Co.
JEA	Jacksonville Electric Authority
JEEP	Joint Emergency Evacuation Plan
JEEP	joint establishment experimental pile
JEN	Junta de Energía Nuclear (Spain)
JETR	Japan Engineering Test Reactor
JFNP	Joseph M. Farley Nuclear Plant
JFNPP	James A. FitzPatrick Nuclear Power Plant
JGC	Japan Gasoline Co., Ltd.
JGCR	Japan Gas-Cooled Reactor
JINR	Joint Institute for Nuclear Research
JPDR	Japan Power Demonstration Reactor (Japan)
JRR	Japanese Research Reactor
JSW	Japan Steel Works, Ltd.
JTG	Joint Test Group

NUREG ACRONYMS AND INITIALISMS

K

KAERI	Korea Atomic Energy Research Institute
KAIF	Korea Atomic Industrial Forum
KALC	krypton absorption in liquid carbon dioxide
KANUPP	Karachi Nuclear Power Plant (Pakistan)
KAPL	Knolls Atomic Power Laboratory
KBG	Kernkraftwerk-Betriebsgesellschaft, m.b.H. (West Germany)
KBWP	Kernkraftwerk Baden-Wuerttemberg Planungsgesellschaft (West Germany)
KE	Kaiser Engineers
KEMA	Tot Keuring van Elektrotechnische Materialen, N.V. (Netherlands)
KERMA	Kinetic energy released in material
KEWA	Kernbrennstoff-Wiederaufarbeitungs-Gesellschaft, m.b.H. (West Germany)
KEWB	Kinetic Experiment on Water Boilers
KFKI	Központi Fizikai Kutató Intézet (Hungary)
KGBS	krypton gas bottling station
KGE	Kansas Gas and Electric Company
KKB	Kernkraftwerk Brunsbüttel, G.m.b.H. (West Germany)
KKK	Kernkraftwerk Krümmel, G.m.b.H. (West Germany)
KKL	Kernkraftwerk Leibstadt, A.G. (Switzerland)
KKN	Kernkraftwerk Niederaichbach, G.m.b.H. (West Germany)
KKP	Kernkraftwerk Phillipsburg, G.m.b.H. (West Germany)
KNFDI	Korea Nuclear Fuel Development Institute
KNP	Koshkonong Nuclear Plant
KNPP	Kewaunee Nuclear Power Plant
KNPS	Kuosheng Nuclear Power Station (Taiwan)
KRB	Kernkraftwerk RWE-Bayernwerk, G.m.b.H. (West Germany)
KRR	Kansai Research Reactor (Japan)
KSB	Klein, Schanzlin and Becker Aktiengesellschaft (West Germany)
KSF	Karen Silkwood Fund
KSGE	Kansas Gas and Electric Co.
KSH	Kernenergie-Gesellschaft Schleswig-Holstein, m.b.H. (West Germany)
KSTR	Kema Suspension Test Reactor (Netherlands)
KTG	Kerntechnische Gesellschaft in Deutschen Atomforum, e.V. (West Germany)
KTS	Kerntechnische Sektion der Schweizerischen Vereinigung für Atomenergie (West Germany)
KWG	Kernkraftwerk Graben, A.G. (Switzerland)
KWL	Kernkraftwerk Lingen, G.m.b.H. (West Germany)
KWO	Kernkraftwerk Obrigheim, G.m.b.H. (West Germany)
KWS	Kernkraftwerk Sud, G.m.b.H. (West Germany)
KWU	Kraftwerk Union Aktiengesellschaft (West Germany)

NUREG ACRONYMS AND INITIALISMS

L

LA	licensing assistant
LA	local alarm
LACBWR	LaCrosse Boiling Water Reactor
LAFM	Los Alamos Fuel Model
LAMPRE	Los Alamos Molten Plutonium Reactor Experiment
LAND	League Against Nuclear Dangers
LANL	Los Alamos National Laboratory
LAPL	Louisiana Power and Light Co.
LAPPES	large power plant effluent study
LAPRE	Los Alamos Power Reactor Experiment
LASL	Los Alamos Scientific Laboratory
LAW	low-acid waste
LAWB	Los Alamos Water Boiler
LBL	Lawrence Berkeley Laboratory
LBP	land-based plant
LBPR	lumped burnable poison rod
LC	level controller
LC	local control
LC	lock closed
LCCV	large-component cleaning vessel
LCHS	large-component handling system
LCL	lower control limit
LCM	LOCA (loss-of-coolant accident) core melt
LCO	limiting condition for operation
LCR	log count rate
LCRE	Lithium-Cooled Reactor Experiment
LCRM	linear count rate meter
LCS	leakage collection system
LCS	leakage control system
LCS	loop control system
LCTI	large components test installation
LCTL	large components test loop
LCV	level control valve
LCV	local control valve
LCVIP	licensee contractor vendor inspection program
LD	letdown
LD	lethal dose
LDCC	large-diameter component cask
L/DRS	level and density recorder switch
LDS	leak-detection system
LDST	letdown storage tank
LE	limit of error
LEAC	levelized energy adjustment clause
LED	light-emitting diode
LEFM	linear elastic fracture mechanics

LEID	limit of error of the inventory difference
LEL	large engineering loop
LEL	lower electrical limit
LEMUF	limit of error on material unaccounted for
LER	licensee event report
LES	limited early site
LESR	limited early site review
LET	linear energy transfer
LEU	license to export uranium
LEU	low enriched uranium
LFBR	liquid fluidized bed reactor
LFBR-CX	liquid fluidized bed reactor critical experiment
LGR	light-water-cooled, graphite-moderated reactor
LGS	lower group stop
LGS	Limerick Generating Station
LH	low head
LHGR	linear heat generation rate
LHM	loop-handling machine
LHS	loop-handling system
LHSI	low-head safety injection
LI	level indicator
LIC	level indicator controller
LIC	loop insertion cell
LIFO	last-in first-out
LILCO	Long Island Lighting Co.
LIM	lower inlet module
LIMB	liquid metal breeder
LIMSW	limit switch
LINAC	linear accelerator
LIRS	level indicator recording switch
LITR	Low Intensity Test Reactor
LIWB	Livermore Water Boiler
LLCS	low-level compaction station
LLD	low-level dose
LLFM	low-level flux monitor
LLLWT	low-level liquid waste tank
LLMPP	liquid level monitor port plug
LLNL	Lawrence Livermore National Laboratory
LLRT	local leak rate test
LLS	low-level solid
LLSV	low-level storage vault
LLSWV	low-level solid waste storage vault
LLTR	large leak test rig
LLW	low-level waste
LLWSV	low-level waste storage vault
LMEC	Liquid Metal Engineering Center
LMFBR	liquid metal fast breeder reactor
LMFR	liquid metal fuel reactor
LMFRE	liquid metal fuel reactor experiment
LMHX	liquid metal heat exchanger

LMTD	logarithmic mean temperature difference
LMWS	liquid waste management system
LNG	liquid natural gas
LO	lock open
LO	lube oil
LOA	line of assurance
LOCA	loss-of-coolant accident
LOCE	loss-of-coolant experiment
LOCP	loss-of-coolant protection
LOCF	loss-of-coolant flow
LOF	loss of feedwater
LOF	loss of flow
LOFA	loss-of-flow accident
LOFC	loss of forced circulation
LOFT	loss of fluid test
LOFW	loss of feedwater
LOHS	loss of heat sink
LOI	loss of ignition
LOMF	loss of main feedwater
LOOP	loss of offsite power
LOP	loss of offsite power
LOPI	loss of pipe integrity
LOPRA	Low Power Reactor Assembly
LORD	licensing online retrieval data
LORDS	licensing online retrieval data system
LOSP	loss of offsite power
LOSP	loss of system pressure
LOST	lube oil storage tank
LOU	letter of understanding
LP	low pressure
LPC	loop preparation cask
LPCI	low-pressure coolant injection
LPCIS	low-pressure coolant injection system
LPCS	low-pressure core spray
LPD	linear power density
LPD	local power density
LPDR	local public document room
LPE	loop preparation equipment
LPG	liquified petroleum gas
LPG	low-pressure gas
LPGS	Liquid Pathway Generic Study
LPI	low-power injection
LPI	low-pressure injection
LPIS	low-pressure injection system
LP&L	Louisiana Power and Light Co.
LPLNG	low-pressure liquefied natural gas
LPM	licensing project manager
LPMA	loose-parts-monitor assembly
LPMS	loose-parts monitoring system
LPNGP	low-pressure noble gas processing

LPR	Lynchburg Pool Reactor
LPRM	local power range monitor
LPRM	low-power range monitor
LPRS	low-pressure recirculation system
LPSI	low-pressure safety injection
LPSIP	low-pressure safety injection pump
LPSW	low-pressure service water
LPT	liquid penetrant testing
LPT	low-pressure turbine
LPTF	low-power test facility
LPTR	Livermore Pool Type Reactor
LPZ	low-population zone
LR	level regulator
LR	load reject
LR	load rejection
LRC	level recorder controller
LRC	Lewis Research Center
LRG	license review group
LRIA	level removable instrument assembly
LRL	Lawrence Radiation Laboratory
LRM	lead reactor manufacturer
LRM	logarithmic radiation monitor
LRP	large rotating plug
LRS	level recording switch
LRS	liquid radwaste system
LS	level switch
LS	lighting system
LS	locked shut
LSA	low specific activity
LSCNS	LaSalle County Nuclear Station
LSDF	large sodium disposal facility
LSDP	Lake Superior District Power Co.
LSP	level setpoint
LSP	lower sequential permissive
LSR	Lynchburg Source Reactor
LSSP	latest scram setpoint
LSSS	limiting safety system setpoint
LSSS	limiting safety system setting
LT	level transmitter
LTBT	Limited Test Ban Treaty
LTD	letdown
LTL	lot truck load
LTM	low-trajectory missile
LTNGP	low-temperature noble gas process
LTR	Lattice Test Reactor
LTR	licensing technical review
LTR	Lockheed Training Reactor
LTSF	lid tank shielding facility
LTV	large test vessel

LUXATOM

Syndicat Luxembourgeois pour l'Industrie Nucléaire
(Luxembourg)

LV

leaky valve

LVDT

linear variable differential transformer

LWA

Limited work authorization

LWBR

light-water breeder reactor

LWCHW

light-water-cooled, heavy-water-moderated reactor

LWMS

liquid waste management system

LWP

liquid waste processing

LWPS

liquid waste processing system

LWR

light-water reactor

LWTS

laundry waste treatment system

NUREG ACRONYMS AND INITIALISMS

M

M/A	manual or automatic
MAA	material access area
MAAP	material access authorization program
MACCT	multiple assembly cooling cask test
MAD	maintenance assembly-disassembly
MAELU	Mutual Atomic Energy Liability Underwriters
MAIN	Mid-American Interpool Network
MAIT	matrix analysis of insider threat
MAM	management and administration manual
MAN	Maschinenfabrik Augsburg-Nürnberg, A.G. (West Germany)
MAPI	Mitsubishi Atomic Power Industries, Inc. (Japan)
MAPLHGR	maximum average planar linear heat-generation rate
MARAD	Maritime Administration, U.S.
MARCA	Mid-Continent Area Reliability Coordination Agreement
MARCH	meltdown accident response characteristic
MASER	microwave amplification by stimulated emission
MAT	management advisory team
MB	mixed bed
MB-2	Model Boiler-Two
MBA	material balance area
MBO	management by objective
MBP	monobutyl phosphate
MBR	material balance report
MC	main condenser
MC	major component
MC	Mitsubishi Corporation
MC&A	material control and accounting
MCA	material control and accountability
MCA	maximum credible accident
MCA	multichannel analyzer
MCB	main control board
MCC	motor control center
MCES	main condenser evacuation system
MCHFR	minimum critical heat flux rate
MCHFR	minimum critical heat flux ratio
MCI	managed cost improvement
MCIS	materials compatibility in sodium
MCLAMS	measurement, control, LEID (limit of error of the inventory difference) and MUF (material unaccounted for) ID (inventory difference) simulation
MCPR	maximum critical power ratio
MCPR	minimum critical power ratio
MCRH	main control room habitability
MCRHS	main control room habitability system
MCS	master control station
MCV	movable closure valve

MD	measured discard
MDA	minimum detectable activity
MDC	maximum dependable capacity
MDCT	mechanical draft cooling tower
MDEFWP	motor-driven emergency feedwater pump
MDHR	mini-decay heat removal
MDL	minimum detectable limit
MDM	metal disintegration machining
MDM	modified diffusion method
MDP	master decommissioning plan
MDS	megawatt demand setter
MDU	motion detection unit
M&E	material and equipment
MEAG	Metropolitan Electric Authority of Georgia
MECAS	multienergy californium assay system
MEED	Metropolitan Edison Co.
MEGAS	multienergy gamma assay system
MEF	median energy of fission
MEFV	maintenance equipment floor valve
MEL	Mitsubishi Electric Corporation (Japan)
MERLIN	medium-energy light-water-moderated industrial nuclear reactor (United Kingdom)
MESF	minimum engineered safety feature
METAFRAM	Métallurgie Française des Poudres, S.A. (France)
MFC	master flow controller
MFCI	molten fuel coolant interaction
MFIV	main feedwater isolation valve
MFL	main feedwater line
MFP	main feed power
MFP	main feedwater pump
MFP	mixed fission product
MFPG	mixed fission products generator
MFPT	main feedwater pump turbine
MFPTC	main feed pump turbine condenser
MFS	Mobilization for Survival
MFT	multiprogramming with a fixed number of tasks
MFTA	multiduct fuel test assembly
MFV	main feedwater valve
MFV	maintenance floor valve
MFV	main feedwater
MFV	main feedwater line break
MFV	main feedwater valve
MG	manual group
MG	motor generator
M-G	motor generator
M/G	motor generator
MGCR	maritime gas-cooled reactor project
MGCR-CX	maritime gas-cooled reactor critical experiment
MGEC	Madison Gas & Electric Co.
MGVC	manual governing valve control
MH-1A	Mobile High Power Plant, No. 1A
MHA	maximum hypothetical accident
MHC	mechanical-hydraulic control

MHD	magnetohydrodynamics
MHDC	magnetohydrodynamic conversion
MHFPR	maximum hypothetical fission-product release
MHI	Mitsubishi Heavy Industries, Ltd. (Japan)
MHNGS	Marble Hill Nuclear Generating Station
MHTS	main heat transport system
MI	manual individual
MI	mineral insulated
MIBK	methyl isobutyl ketone
MICDS	movable in-core detector system
MIDAS	Meteorological Information and Dose Acquisition System
MIDS	movable instrument drive system
MIMS	metal impact monitoring system
MIS	management information system
MIST	maximum isothermal system temperature
MIST	minor isotopes safeguards technique
MIST	multi-loop integral system test
MIT	Massachusetts Institute of Technology
MITI	Ministry of International Trade and Industry (Japan)
MITR	Massachusetts Institute of Technology Reactor
MKU	Mary Kathleen Uranium, Ltd. (Australia)
ML	manufacturing license
ML-1	Mobile Low Power Plant, No. 1
MLD	median lethal dose
MLD	mean low-water datum
MLHGR	maximum linear heat generation ratio
MLO	main lube oil
MLS	Medilab Select (Belgium)
MLW	mean low water
MLWMS	miscellaneous liquid-waste-management system
MM	modified Mercalli
MME	Mercantile Marine Engineering and Graving Docks Co., N.V. (Belgium)
MMG	motor-motor generator
MMWEC	Massachusetts Municipal Wholesale Electric Co.
MMI	man/machine interface
MMI	modified Mercalli intensity
MMPA	Magnetic Material Producers Association
MNGP	Monticello Nuclear Generating Plant
MNP	maximum negative pressure
MNPS	Millstone Nuclear Power Station
MNS	McGuire Nuclear Station
MO	mixed oxide
MO	modulate open
MO	motor operator
MOD	motor-operated disconnect
MONAL	mobile nondestructive assay laboratory
MOP	maintenance outline procedure
MORT	management oversight risk tree
MOTA	materials open test assembly
MOU	memorandum of understanding
MOV	motor-operated valve
MOX	mixed-oxide fuel

MP	maintenance procedure
MP	Midland Plant
MPA	multiplant action
MPAI	maximum permissible annual intake
MPC	maximum permissible concentration
MPC	Metals Properties Council
MPC	Montana Power Co.
MPD	maximum permissible dose
MPE	maximum permissible exposure
MPL	master parts list
MPL	maximum permissible level
MPL	mechanical properties loop
MP&L	Mississippi Power and Light Co.
MPO	manufacturing production order
M&PP	materials and plant protection
MPP	maximum positive pressure
MPR	mechanical pressure regulator
MPRE	medium power reactor experiment
MPRT	multipurpose rail transport
MPS	manpower system
MPSC	Maine Public Service Co.
MPT	magnetic particle testing
MPT	minimum pressurization temperature
MPX	multiplexer
MQS	motion to quash subpoena
MRBT	multirod burst test
MRC	Medical Research Council (United Kingdom)
MRI	material receiving instruction
MRMU	mobile radiological measuring unit
MRR	material receiving (inspection) report
MRR	Medical Research Reactor
MRS	manipulator repair shop
MRS	monitored retrievable storage
MRSS	main and reheat steam system
MS	main steam
MS	manual sequential
MS	margin of safety
MS	milestone
MSA	material surveillance assembly
MSA	mechanical signature analysis
MSA	mines safety appliance
MSAR	mines safety appliance research
MSB	main steamline break
MSBE	Molten Salt Breeder Experiment
MSBR	Molten Salt Breeder Reactor
MSCA	mixed spectrum critical assembly
MSCI	molten steel coolant interaction
MSG	modular steam generator
MSIS	main steam isolation signal
MSIV	main steam isolation valve
MSIVLCS	main steamline isolation valve leakage control system
MSL	main steam line
MSL	maximum stillwater level

MSL	mean sea level
MSLA	main steamline accident
MSLB	main steamline break
MSLD	mass spectrometer leak detector
MSLIVSS	main steamline isolation valve sealing system
MSM	master/slave manipulator
MSM	modified source multiplication
MSR	material status report
MSR	maximum steam rate
MSR	moisture separator reheater
MSR	Molten Salt Reactor
MSRE	Molten Salt Reactor Experiment
MSRV	main steam relief valve
MSS	main steam system
MSS	main support structure
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry
MSS	mixed spectrum superheater
MSS	modified scram system
MSSCE	mixed spectrum superheater critical experiment
MSSR	mixed spectrum superheat reactor
MSSS	main steam supply system
MSV	mean square voltage
MS&W	maintenance shop and warehouse
MT	material transfer
MT	materials test
MT	melt through
MTBF	mean time between failures
MTC	moderator temperature coefficient
M&TE	measuring and test equipment
MTER	multitest evaluation report
MTF	mean time to failure
MTG	main turbine generator
MTI	Mechanical Technology, Inc.
MTL	materials test loop
MTL	Mobiltherm light
MTOS	magnetic tape operations system
MTPF	maximum total peaking factor
MTR	Materials Testing Reactor
MTS	module tracking system
MTTR	mean time to repair
MTU	module test unit
MU	makeup
MUF	material unaccounted for
MU&P	makeup and purification
MUR	management update and retrieval
MUR	Mock-Up Reactor
MUSE	Musicians United for Safe Energy
MUT	makeup tank
MUX	multiplexer
MVP	mechanical vacuum pump
MVS	multiple virtual storage
MVT	multiprogramming with a variable number of tasks

MWHT
MWO
MWST
MYAP
MYAPP
MZFR

miscellaneous waste holdup tank
maintenance work order
miscellaneous waste storage tank
Maine Yankee Atomic Power Co.
Maine Yankee Atomic Power Plant
Mehrzweck Forschungs Reaktor (West Germany)

NUREG ACRONYMS AND INITIALISMS

N

N/A	not applicable
NA	not applicable
NA	not available
NAA	neutron activation analysis
NAB	Nuclear Assembly Building
NAC	national agency check
NAD	nuclear accident dosimetry
NAEC	North Anna Environmental Coalition
NAGRA	Nationale Genossenschaft für die Lagerung Radioaktiver Abfälle (Switzerland)
NAIG	Nippon Atomic Industry Group Co., Ltd. (Japan)
NAPCA	National Air Pollution Control Administration
NAPS	North Anna Power Station
NAPSIC	North American Power Systems Interconnection Committee
NAPUS	nuclear auxiliary power unit system
NARADCom	Natick Research and Development Command
NARM	naturally occurring and accelerator-produced radioactive materials
NARS	National Archives and Records Service
NARUC	National Association of Regulatory Utility Commissioners
NAS	National Academy of Sciences
NASA	National Aeronautics and Space Administration
NASAP	nonproliferation alternative systems assessment program
NAS-NRC	National Academy of Sciences - National Research Council
NAWAS	national warning system
NE	nuclear blank
NB	nuclear boiler
NBGEL	New Bedford Gas and Edison Light Co.
NBL	New Brunswick Laboratory
NBR	nuclear boiler rated
NBS	National Bureau of Standards
NBSR	National Bureau of Standards Reactor
NC	neutron controller
NC	normally closed
NCBR	near commercial breeder reactor
NCP	network control program
NCR	nonconformance report
NCR	notification of change report
NCRP	National Council on Radiation Protection and Measurements
NCRWS	National Campaign for Radioactive Waste Safety
NCS	national communications system
NCS	nuclear criticality safety
NCSAG	Nuclear Cross Section Advisory Group
NCSCR	North Carolina State College Reactor

NCVP	natural circulation verification program
ND	negative declaration
NDA	no detectable activity
NDA	nondestructive assay
NDC	nuclear data committee
NDCT	natural draft cooling tower
NDE	nondestructive examination
NDHX	natural draft heat exchanger
NDL	nuclear data link
NDT	nil ductility transition
NDT	nondestructive testing
NDTT	nil ductility transition temperature
NE	normally energized
NEA	Nuclear Energy Agency
NEA	Nuclear Engineering Associates
NEB	Nuclear Energy Board (Ireland)
NEC	National Electric Code
NEC	nuclear energy center
NECAP	Nutmeg Electric Companies Atomic Project
NECO	Nuclear Engineering Company
NECSS	Nuclear Energy Center Site Survey
NEES	New England and Electric System
NEGEA	New England Gas and Electric Association
NELIA	Nuclear Energy Liability Insurance Association
NELPIA	Nuclear Energy Liability Property Insurance Association
NEMA	National Electrical Manufacturers Association
NENE	Northeast Nuclear Energy Co.
NEP	New England Plant
NEPA	National Environmental Policy Act
NEPCO	New England Power Company
NEPIA	Nuclear Energy Property Insurance Association
NERA	National Economic Research Associates, Inc.
NERC	National Electric Reliability Council
NERC	National Environment Resource Council (United Kingdom)
NERC	Nuclear Energy Research Center (Belgium)
NERHL	Northeastern Radiological Health Laboratory
NERV	nuclear emulsion recovery vehicle
NERVA	nuclear engine for rocket vehicle application
NESC	National Electric Safety Code
NESCWS	nonessential services chilled water system
NESF	normal engineered safety feature
NESP	National Environmental Studies Project
NEST	nuclear emergency search team
NETR	Nuclear Engineering Test Reactor
NEUSSN	Northeastern U.S. Seismic Network
NEUT	Northeast Utilities
NEVP	Nevada Power Co.
NEW	Nuclear Energy Women

NEWSAR	nuclear energy waste space transportation and removal
NF	neutron flux
NFC	no further consequences
NFCA	nonfuel core array
NFI	Nuclear Fuel Industries, Ltd. (Japan)
NFPA	National Fire Protection Association
NFRRC	nuclear fuel recovery and receiving center
NFS	Nuclear Fuel Services
NFSA	new fuel storage area
NG	noble gas
NGA	Nationale Gesellschaft Zür Förderung der Industriellen Atomtzechnik (Switzerland)
NGE	North Georgia Electric Membership Corp.
NGF	Natural Guard Fund
NGSF	noble gas storage facility
NI	nuclear instrumentation
NI	nuclear island
NIAC	Nuclear Insurance Association of Canada
NIC	Nuclear Industry Consortium (Belgium)
NIH	National Institutes of Health
NII	Nuclear Installations Inspectorate (United Kingdom)
NIM	nuclear instrument module
NIOSH	National Institute of Occupational Safety and Health
NIPA	notice of initiation of procurement action
NIPS	Northern Indiana Public Service Co.
NIRA	Nucleare Italiana Reattori Avanzati, SpA (Italy)
NIRB	Nuclear Insurance Rating Bureau
NIRNS	National Institute for Research in Nuclear Science (United Kingdom)
NIRS	National Institute of Radiological Sciences (Japan)
NIRS	Nuclear Information and Resource Service
NIS	nuclear instrumentation system
NISCO	Nuclear Inspection Services Company
NJBPU	New Jersey Board of Public Utilities
NJOAL	New Jersey Office of Administrative Law
NLI	National Lead Industries
NMCC	Nuclear Material Control Center (Japan)
NMEC	Northern Michigan Electric Cooperative, Inc.
NMIS	nuclear materials information system
NMIS	nuclear materials inventory system
NMMSS	nuclear materials management and safeguards system
NMP	national meter programming
NMP	Niagara Mohawk Power Corp.
NMPNS	Nine Mile Point Nuclear Station
NMS	national measurement system
NMS	neutron monitoring system
NMSS	Nuclear Material Safety and Safeguards, Office of
NMST	new materials system test

NNC	National Nuclear Corporation, Ltd. (United Kingdom)
NNCSC	National Neutron Cross Section Committee
NNDC	National Nuclear Data Center
NNEC	National Nuclear Energy Commission (Brazil)
NNECO	Northeast Nuclear Energy Co.
NNI	non-nuclear instrumentation
NNIS	non-nuclear instrumentation system
NNPA	Nuclear Non-Proliferation Act
NNS	non-nuclear safety
NNSDD	Newport News Shipbuilding and Dry Dock Company
NO	normally open
NOAA	National Oceanic and Atmospheric Administration
NOL	Naval Ordnance Laboratory
NOL	normal operating loss
NOP	normal operating procedure
NORCUS	Northwest College and University Association for Science
NOS	not otherwise specified
NOV	notice of violation
NOWUS	normal operation with unscram
NP	negative pressure
NPA	nuclear plant analyzer
NPC	Nuclear Power Co., Ltd. (United Kingdom)
NPC	Nuclear Power Corp. (United Kingdom)
NPCC	Northeast Power Coordinating Council
NPD	national policy debate
NPD	Nuclear Power Demonstration (Canada)
NPDB	Nuclear Plant Data Bank
NPDES	national pollution discharge elimination system
NPEC	Nuclear Power Engineering Committee
NPF	nuclear power facility
NPG	Nuclear Power Group, The (United Kingdom)
NPGS	nuclear power generating station
NPIS	nuclear plant island structure
NPO	nuclear plant operator
NPPD	Nebraska Public Power District
NPR	New Production Reactor
NPRCG	Nuclear Public Relations Contact Group (Italy)
NPRDS	nuclear plant reliability data system
NPRF	Northrop Pulse Radiation Facility
NPS	numerical plotting system
NPSH	net positive suction head
NPSRA	Nuclear-Powered Ship Research Association (Japan)
NPTF	nuclear proof test facility
NOAA	Nuclear Quality Assurance Agency
NR	narrow resonance
NR	nonconformance report
NRAP	naturally radioactive product
NRB	Nonconformance Review Board

NRC	National Research Council, U.S.
NRC	Nuclear Regulatory Commission, U.S.
NRDC	National Resources Defense Council
NRDS	Nuclear Rocket Development Station
NREP	National Reliability Evaluation Program
NREP	neutron resonance escape probability
NRHE	nonregenerative heat exchanger
NRHX	nonregenerative heat exchanger
NRIM	narrow resonance infinite mass
NRL	Naval Research Laboratory (United Kingdom)
NRMA	Nuclear Records Management Association
NRPB	National Radiological Protection Board
NRR	Naval Research Reactor
NRR	Nuclear Reactor Regulation, Office of
NRRO	nuclear radiation-resistant oil
NRTS	National Reactor Test Station
NRW	nonradioactive waste
NRWV	nonradioactive waste vent
NRX	National Research Reactor
NEX	nuclear engine reactor experiment
NS	near side
NS	normally shut
NS	nuclear ship
NSA	<u>Nuclear Science Abstracts</u>
NSA	Nuclear Systems Associates
NSAC	Nuclear Safety Analysis Center
NSC	National Security Council
NSCR	Nuclear Science Center Reactor
NSDM	national security decision memorandum
NSF	National Sanitation Foundation
NSF	National Science Foundation
NSF	Nuclear Science Foundation
NSFP	non-sodium fire protection
NSI	national security information
NSIC	Nuclear Safety Information Center
NSMH	nuclear systems material handbook
NSDA	nuclear safety operational analysis
NSP	Northern States Power Co.
NSPP	nuclear safety pilot plant
NSPS	nuclear safety protection system
NSR	Neutron Source Reactor
NSRA	Nuclear Safety Research Association (Japan)
NSRB	Nuclear Safety Review Board
NSRL	Nuclear Structure Research Laboratory
NSRR	nuclear safety research reactor
NSS	nuclear steam system
NSSM	national security study memorandum
NSSS	nuclear steam supply system

NSSSS	nuclear steam supply shutoff system
NSWS	nuclear service water system
NT	neutron transmitter
NTCP	near-term construction permit
NTF	nuclear test facility
NTIS	National Technical Information Service
NTOL	near-term operating license
NTP	National Toxicology Program
NTP	normal temperature and pressure
NTP	nuclear test plant
NTR	Nuclear Test Reactor
NTS	Nevada Test Site
NTSB	National Transportation Safety Board
NUCLNOR	Centrales Nucleares del Norte, S.A. (Spain)
NUCLIT	Nucleare Italiana (Italy)
NUEXCO	Nuclear Exchange Corp.
NUFCOR	Nuclear Fuels Corp. of South Africa
NUMEC	Nuclear Materials and Equipment Corp.
NUMS	nuclear materials security
NUPEC	Nuclear Power Engineering Test Center
NURE	national uranium resource evaluation program
NUS	Nuclear Utilities Service
NVH	nitrogen vent header
NW	normal waste
NWCC	neutron well coincidence counter
NWL	normal water leg
NWP	Nuclear Waste Project
NWPA	Nuclear Waste Policy Act
NWS	National Weather System
NYSADA	New York State Atomic and Space Development Authority
NYSEG	New York State Electric and Gas Corp.

NUREG ACRONYMS AND INITIALISMS

OA	operating authorization
OAB	Országos Atomenergia Bizottság (Hungary)
OAD	operational availability date
OAI	outside air intake
OARP	Operator Accelerated Retraining Program
OATP	operational acceptance test procedure
OBE	Office of Business Economics
OBE	operating-basis earthquake
OBERS	Office of Business Economics Research Service
OC	operating curve
OCA	Office of Congressional Affairs
OCB	oil (operated) circuit breaker
OCB	oil collection basin
OCDE	Organisation de Coopération et de Développement Économiques
OCDRE	Organic-Cooled Deuterium Reactor Experiment (Canada)
OCI	oxide control and indication
OCM	Office of the Commission
OCNGS	Oyster Creek Nuclear Generating Station
OCR	operational control record
OD	outside diameter
ODCM	offsite dose calculation manual
OE	operating engineer
OEC	Ohio Edison Co.
OECD	Organization for Economic Cooperation and Development
OFA	optimized fuel assembly
OG	off-gas
OGI	off-gas isolation
OGR	ORNL (Oak Ridge National Laboratory) Graphite Reactor
OGS	off-gas system
OGST	overhead guide sleeve tool
OH	Ontario Hydro (Canada)
OHLH	overhead heavy load handling
OHRS	overflow heat removal system
OHST	overhead storage tank
OHTCS	outer head temperature control system
OI	Office of Investigations
OI	optical isolator
OIA	Office of Inspector and Auditor
OIC	on-line instrument and control
OIP	operating internal pressure
OJT	on-the-job-training
OL	operating license
OL	operator license
OLIP	on-line instrument package
O&M	operation and maintenance
OM	operations manager

O/M	oxygen-to-metal ratio
OMB	Office of Management and Budget, U.S.
OMCA	organic-moderated critical assembly
OMM	operation and maintenance manual
OMR	Organic-Moderated Reactor
OMRCA	organic-moderated reactor critical assembly
OMRE	Organic-Moderated Reactor Experiment
OMRR	Ordnance Material Research Reactor
ONS	Oconee Nuclear Station
OOS	out of sequence
OOS	out of service
OP	oxygen pressure
OPE	Office of Policy Evaluation
OPEC	Organization of Petroleum Exporting Countries
OPEN	Organisation des Producteurs d'Énergie Nucléaire (France)
OPERA	out-of-pile expulsion and reentry apparatus
OPFM	outlet plenum feature model
OPPD	Omaha Public Power District
OPR	offsite procurement request
OPR	open pool reactor
OPS	Offshore Power Systems
OPS	operational protection system
OPS	overpressure protection system
OPS	overpressurization protection system
OPST	out-of-pile systems test
OPT	optimization
OPX	off premise extension
OQA	operations quality assurance
OR	operating reactor
ORA	orifice rod assembly
ORAU	Oak Ridge Associated Universities
ORB	outside reactor building
ORC	on-line reactivity computer
ORE	occupational radiation exposure
ORFM	outlet region feature model
ORGDP	Oak Ridge Gaseous Diffusion Plant
ORIC	Oak Ridge Isochronous Cyclotron
ORNL	Oak Ridge National Laboratory
ORRR	Oak Ridge Research Reactor
ORSORT	Oak Ridge School of Reactor Technology
ORU	Orange and Rockland Utilities, Inc.
OS	operating system
OSC	operational support center
OSG	operations support group
OSHA	Occupational Safety and Health Act
OSP	operational surveillance program
OSS	operational storage site
OST	Office of Science and Technology
OSUR	Ohio State University Reactor
OT	operating temperature
OT	operational technology
OTA	Office of Technology Assessment
OTA	open test assembly

OTC	once-through cooling
OTIS	once-through integral system
OTR	Organic Test Reactor
OTSG	once-through steam generator
OTSR	once-through superheat reactor
OTTS	operations training and technical services
OUO	official use only
OWP	operations work procedure
OWR	Omega West Reactor
OWRR	Office of Water Resources Research

NUREG ACRONYMS AND INITIALISMS

P

PA	personnel area
PA	pressure alarm
PA	Privacy Act
PA	protected area
PA	public address
PA	Public Affairs, Office of
PA	purge alarm
PAA	primary auxiliary area
PAB	preliminary as-built
PAB	primary auxiliary building
PABX	private automatic branch exchange
PAC	protection auxiliary cabinet
PAC	public affairs coordinator
PACC	protected air-cooled condenser
PACE	plant acquisition and construction equipment
PACP	Pacific Power Co.
PACV	postaccident containment venting
PAD	performance analysis and design
PADS	plant alarm and display system
PAEC	Pakistan Atomic Energy Commission
PAEC	Philippine Atomic Energy Commission
PAG	protective action guide
PAHL	pressure alarm, high limit
PAHR	postaccident heat removal
PAIC	public address intercommunications system
PAL	permissive action link
PAL	personnel airlock
PAL	programmer assistance and liaison
PAL	prototype application loop
PAM	postaccident monitoring
PAMS	postaccident monitoring system
PAPAS	pin and pellet assay system
PAPUC	Pennsylvania Public Utility Commission
PAR	Pennsylvania Advanced Reactor
PAR	performance appraisal report
PAR	Pool Atómico Português (Portugal)
PAR	purchasing approval request
PARD	post-accident radioactivity depletion
PARR	Pakistan Atomic Research Reactor
PARR	postaccident radioactivity removal
PASNY	Power Authority of the State of New York
PAT	performance appraisal team
PAT	plutonium air transportable
PAX	private automatic exchange
PB	pipe break
PB	proportional band
PBAPS	Peach Bottom Atomic Power Station

PBE	prompt burst experiment
PBF	Power Burst Facility
PBNP	Phipps Bend Nuclear Plant
PBNP	Point Beach Nuclear Plant
PBR	pebble bed reactor
PBR	Plum Brook Reactor
PBRE	pebble bed reactor experiment
PBRF	Plum Brook Reactor Facility
PBS	pressure boundary subsystem
PBS	project breakdown structure
PBTF	pump bearing test facility
PBX	private branch exchange
PC	plant computer
PC	polar crane
PC	pressure controller
PC	process computer
PCA	pool critical assembly
PCA	primary control assembly
PCA	primary coolant activity
PCAM	punched card accounting machine
PCAS	primary central alarm station
PCB	printed circuit board
PCC	plutonium concentrator concentrate
PCC	process chemistry cell
PCD	plutonium concentrator distillate
PCD	power control device
PCDC	plutonium canister decontamination cell
PCETF	Power Conversion Equipment Test Facility
PCI	pellet clad interaction
PCIOMR	preconditioning interim operating management recommendation
PCIS	primary containment isolation system
PCL	permissible contamination limit
PCLDI	prototype closed-loop development installation
PCLS	prototype closed-loop system
PCLT	prototype closed-loop test
PCM	pending contractual matter
PCM	power cooling mismatch
PCN	procedure change notice
PCP	post-construction permit
PCP	primary coolant pump
PCP	process control program
PCP	program control procedure
PCPS	pool cooling and purification system
PCRB	personnel and control room building
PCRD	primary control rod driveline
PCRDM	primary control rod drive mechanism
PCRM	primary certified reference material
PCRS	primary control rod system
PCRV	prestressed concrete reactor vessel
PCS	passive containment system
PCS	plant computer system
PCS	plant control system

PCS	power conversion system
PCS	primary coolant system
PCS	process computer system
PCS	process control sheet
PCT	peak centerline temperature
PCT	peak cladding temperature
PCTF	plant component test facility
PCTR	Physical Constant Test Reactor
PCV	pressure control valve
PCV	pressurizer control valve
PD	population density
PD	population distribution
PDA	predocketed application
PDA	preliminary design acceptance
PDA	preliminary design approval
PDA	preliminary design assessment
PDA	preliminary design authorization
PDAS	plant data acquisition system
PDC	predocketed construction
PDD	projected decision date
PDD	prospective decision date
PDES	preliminary draft environmental statement
PDF	plant design factor
PDF	project design flood
PDH&DS	plant data handling and display system
PDIL	power-dependent insertion limit
PDP	positive displace pump
PDP	Process Development Pile
PDP	project definition phase
PDR	preliminary design report
PDR	pressurized deuterium reactor
PDR	public document room
PDRP	program data requirement plan
PDS	plant data system
PDS	power distribution system
PE	project engineer
PECO	Philadelphia Electric Co.
PEDS	protective equipment decontamination section
PEIS	programmatic environmental impact statement
PEMA	Pennsylvania Emergency Management Agency
PENELEC	Pennsylvania Electric Company
PEO	patrol emergency officer
PEO	plant equipment operator
PEPCO	Potomac Electric Power Co.
PEPR	precision encoder and pattern recognition
PERMS	process and effluent radiological monitoring system
PERMSS	process and effluent radiological monitoring and sampling system
PERT	program evaluation and review technique
PET	performance evaluation team
PETA	plutonium equipment transfer area
PEWS	plutonium equipment warm shop
PF	partition factor

PF	Progressive Foundation
PF	proposed finding
PF	purge fan
PFCS	primary flow control system
PFD	process flow diagram
PFE	plenum fill experiment
PFES	proposed final environmental statement
PFG	paper flow group
PFG	pipng and filter gallery
PFR	Prototype Fast Reactor (United Kingdom)
PFS	peripheral fixed shim
PGCC	power generation control complex
PG&E	Pacific Gas and Electric Co.
PGG	power generation group
PHA	pulse-height analyzer
PHERMEX	pulsed high-energy radiographic machine emitting X-rays
PHF	plug handling fixture
PHR	process heat reactor program
PHS	Public Health Service
PHSPS	preservation, handling, storage, packaging, and shipping
PHTS	primary heat transport system
PHWR	pressurized heavy-water-moderated and cooled reactor
PHWR	pressurized heavy-water reactor
PI	physical inventory
P&I	pipng and instrumentation
PI	position indication
PI	pressure indicator
PI	process instrumentation
PI	purge isolation
PIC	pressure indicating controller
PIC	public information center
PID	partial initial decision
PID	pipng and instrumentation diagram
P&ID	pipng and instrumentation diagram
P&ID	process and instrumentation diagram
PID	proportional integral derivative
PIE	postirradiation examination
PIE	postirradiation experiment
PINGP	Prairie Island Nuclear Generating Plant
PINSTECH	Pakistan Institute of Nuclear Science and Technology
PIO	public information officer
PIOTA	postirradiation open test assembly
PIOTA	proximity-instrumented open test assembly
PIP	prototypic inlet piping
PIPPAP	pile for producing power and plutonium
PIR	Petrolite Irradiation Reactor
PIRG	Public Interest Research Group
PIS	pressure-indicating switch
PIS	process instrumentation system
PL	panel left
PL	pipng load
PL	Public Law
P.L.	Public Law

PLATR	Pawling lattice test rig
PLBR	prototype large breeder reactor
PLC	powerline carrier
PLCEA	part-length control element assembly
PLCEDM	part-length control element drive mechanism
PLOCAP	post-loss-of-coolant-accident protection
PLS	precautions, limitations, and setpoints
PLT	Princeton Large Torus
PM	photomultiplier
PM	Portable Medium Power Plant
PM	pressure multiplier
PM	program manager
PMC	programmable machine controller
PMC	Project Management Corporation
PME	process and manufacturing engineering
PMF	probable maximum flood
PMH	probable maximum hurricane
PMI	plant manager instruction
PMIS	plant monitoring and information system
PMIS	precision mechanism in sodium
PMM	pedestal-mounted manipulator
PMNP	platform-mounted nuclear plant
PMOG	plutonium maintenance and operating gallery
PMP	preoperational monitoring program
PMP	preventive maintenance procedure
PMP	probable maximum precipitation
PMS	performance measurement system
PMS	plant monitoring system
PMS	probable maximum surge
PMT	photomultiplier tube
PMU	plant makeup
PMWP	probable maximum winter precipitation
PN	plant normal
PN	preliminary notification
PNE	peaceful nuclear explosion
PNET	peaceful nuclear explosion treaty
PNO	preliminary notification
PNPF	Piqua Nuclear Power Facility
PNPP	Perry Nuclear Power Plant
PNR	Pittsburgh Naval Reactors Office
PNS	Perkins Nuclear Station
PNWL	Pacific Northwest laboratories
PO	purchase order
POA	provisional operating authorization
POD	point of discharge
POG	pipng (instrumentation) and operating gallery
POGE	Portland General Electric Co.
POIS	prototype online instrument system
POL	provisional operating license
POM	position modulator
POP	peak overpressure
POP	proof of principle
POPR	prototype organic power reactor

POPS	pressurizer overpressure protection system
POR	plutonium organic recycle
PORACC	principles of radiation and contamination control
PORC	Plant Operations Review Committee
PORV	pilot-operated relief valve
PORV	power-operated relief valve
POS	plant operating system
POS	point of sale
POSA	preliminary operating safety analysis
PP	Palisades Plant
PP	primary pressure
PPA	plutonium preparation area
PPA	Princeton-Pennsylvania Proton Accelerator
PPC	Pennsylvania Power Co.
PPC	plutonium process cell
PPC	plutonium product cell
PPDD	preliminary project design description
PPDIL	pre-power-dependent insertion limit
PPFR	plutonium product filter room
PP&L	Pennsylvania Power and Light Co.
PPL	Plasma Physics Laboratory
PPL	plutonium product loadout
PPP	portable plotting package
PPS	plant protection system
PPS	plutonium product storage
PPS	primary power system
PPS	pulses per second
PPSAS	program planning and status assessment system
PPSP	power plant sitting program
PPSPS	plutonium product shipping preparation station
PPSV	plutonium product storage vault
PQAD	plant quality assurance director
PQAM	project quality assurance manager
PQR	procedure qualification record
PR	Philippine Reactor
PR	plant recovery
PR	power range
PR	pressure recorder
PR+	(reactor) pressure plus
PR	proposed rule
PRA	plutonium recycle acid
PRA	probabilistic risk assessment
PRB	Plant Review Board
PRB	Procedure Review Board
PRBSG	pseudo-random binary sequence generator
PRC	plutonium rework cell
PRC	pressure recorder controller
PRCF	plutonium recycle critical facility
PRD	potentially reportable deficiency
PRDC	Power Reactor Development Co.
PRE	processing refabrication experiment
PRF	penetration room filtration
PRG	procedure review group

PRM	personal radiation monitor
PRM	petition for rule making
PRM	power rang monitor
PRM	process radiation monitor
PRM	proposal for rule making
PRNC	Puerto Rico Nuclear Center
PROS	Professional Reactor Operator Society
PRR	Pawling Research Reactor
PRR	Philippine Research Reactor
PRR	pressure rise rate
PRR	Puerto Rico Reactor
PRS	pressure response spectrum
PRS	process radiation sampler
PRSC	plutonium rework sample cell
PRT	pressurized relief tank
PRT	pressurizer relief tank
PRT	prompt relief trip
PRTR	Plutonium Recycle Test Reactor
PRV	pressure relief valve
PRVS	penetration room ventilation system
PRWRA	Puerto Rico Water Resources Authority
PS	Pilgrim Station
PS	power supply
PS	pressure switch
PSA	personnel and service area
PSA	probabilistic safety analysis
PSAR	preliminary safety analysis report
PSB	plant service building
PSC	plutonium stripping concentrate
PSC	Public Service Co. of Colorado
PSCD	plutonium stripping concentration distillate
PSD	power spectrum density
PSDD	preliminary system design description
PSE	pressurized subcritical experiment
PSE&C	power supply engineering and construction
PSE&G	Public Service Electric and Gas Co. of New Jersey
PSF	plutonium stripper feed
PSH	pressure switch, high
PSI	preservice inspection
PSID	preliminary safety information document
PSIN	Public Service Co. of Indiana, Inc.
PSMD	Public Service Co. of Maryland
PSNH	Public Service Co. of New Hampshire
PSNM	Public Service Co. of New Mexico
PSNP	Pebble Springs Nuclear Plant
PSOK	Public Service Co. of Oklahoma
PSP	primary sodium pump
PSPGV	primary sodium pump guard vessel
PSPL	Puget Sound Power and Light Co.
PSQ	personnel security questionnaire
PSR	Pennsylvania State University Research Reactor
PSR	peripheral shim rod
PSR	procurement status report

PSRM	post-scrum reactivity monitor
PSS	primary sampling system
PSS	probabilistic safety study
PSS	process sampling system
PST	primary surge tank
PSTF	pressure suppression test facility
PSTF	proximity sensor test facility
PSTF	pump seal test facility
PSUR	Pennsylvania State University Reactor
PSWS	potable and sanitary water system
PT	penetrant test
PT	periodic test
PT	phototransistor
PT	pool temperature
PT	preoperational test
PT	pressure transmitter
PTC	passive thermal control
PTC	post-turnover change
PTI	pipe test insert
PTI	plugging temperature indicator
PTL	Pittsburgh Testing Laboratory
PTP	peak-to-peak
PTP	proximity test plug
PTR	Pool Test Reactor
PTR	Pool Training Reactor
PTR	Pressure Tube Reactor
PTR	programmer trouble report
PTR	Proof Test Reactor
PTS	pressurized thermal shock
PT/SP	pressure tube to spool piece
PTSR	pressure tube superheat reactor
PUA	plant-unique analysis
PUC	public utility commission
PUD	public utility district
PULSTAR	Pulse Training Assembled Reactor
PUP	peak underpressure
PUP	plutonium utilization program
PUR	Purdue University Reactor
PUSPATI	Pusat Penyelidikan Atom Tun Ismail (Malaysia)
PV	pressure valve
PVC	polyvinyl chloride
PVNGS	Palo Verde Nuclear Generating Station
PVRC	Pressure Vessel Research Committee
PVS	plant vent stack
PVTI	pipng and valve test insert
PW	potable water
P&W	Pratt and Whitney
PWHA	plutonium waste handling area
PWHT	post-weld heat treatment
PWR	pressurized-water reactor
PWST	protected water storage tank
PZR	pressurizer
PZR LCS	pressurizer level control system

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NUREG ACRONYMS AND INITIALISMS

Q

QA	quality assurance
QAC	quality assurance checklist
QAC	quality assurance criterion
QAI	quality assurance instruction
QAIP	quality assurance inspection procedure
QAIRG	Quality Assurance Installation Review Group
QAM	quality assurance manual
QA&O	quality assurance and operations
QAP	quality assurance procedure
QAP	quality assurance program
QAPI	quality assurance program index
QAPP	quality assurance program plan
QAR	quality assurance requirement
QAR	quality assurance representative
QC	quality control
QCIP	quality control inspection procedure
QCS	Quad-Cities Station
QE	quality engineer
QF	quality factor
QF	quality form
QHR	quality history record
QLR	quick look report
QO	quick opening
QOBV	quick-opening blowdown valve
QPM	quality program manager
QSR	quarterly statistical report
QTP	quality test plan
QV	quality verification

NUREG ACRONYMS AND INITIALISMS

R

RA	reduction of area
RA	rental agreement
RAB	reactor auxiliary building
RABNVS	reactor auxiliary building normal ventilation system
RABV	reflood assist bypass valve
RAC	radiological assessment coordinator
RACES	Radio Amateur Civil Emergency Service
RAD	rapid access data
RADS	radiation and dosimetry service
RAI	request for additional information
RAIP	requester's approval in principle
RAM	radioactive material
RAM	random access memory
RAMS	regulatory activities manpower system
RANN	Research Applied to National Needs Program
RAPS	radioactive argon processing system
RAPTUS	rapid thorium-uranium system
RAREF	radiation and repair engineering facility
RAS	reactor analysis and safety
RAS	recirculation actuation signal
RAS	remote acquisition station
RAT	radiological assessment team
RB	reactor building
RBA	radial blanket assembly
RBAL	reprocessing building analytical laboratory
RBCCW	reactor building closed cooling water
RBCR	reprocessing building control room
RBCS	reactor building cooling system
RBCU	reactor building cooling unit
RBE	relative biological effectiveness
RBEDT	reactor building equipment drain tank
RBESI	reactor building exhaust system isolation
RBHS	reactor building heating system
RBM	rod-block monitor
RBOF	receiving basin for offsite fuel
RBP	reactor building protection
RBS	reactor building spray
RBS	River Bend Station
RBSR	reprocessing building (cable) spreading room
RBVI	reactor building ventilation isolation
RBVPRM	reactor building vent process radiation monitor
RC	reactor cavity
RC	reactor coolant
RC	recording controller
RCB	reactor containment building

RCBHT	reactor coolant bleed holdup tank
RCBT	reactor coolant bleed tank
RCC	reactor closed cooling
RCC	rod cluster control
RCCA	rod cluster control assembly
RCDT	reactor coolant drain tank
RCE	reactor compatibility experiment
RCFC	reactor containment fan cooler
RCG	radioactivity concentration guide
RCG	recommended concentration guide
RCGM	reactor cover gas monitor
RCIC	reactor core isolation cooling
RCICS	reactor core isolation cooling system
RCL	reactor coolant loop
RCLC	reactor coolant letdown cooler
RCN	Reactor Centrum Nederland (Netherlands)
RCP	radiological control program
RCP	reactor characterization program
RCP	reactor coolant pump
RCPB	reactor coolant pressure boundary
RCRA	Resources Conservation and Recovery Act
R&CS	radiological and chemical support
RCS	reactor coolant system
RCT	response coordination team
RCT	rework/completion tag
RCTS	reactor coolant treatment system
RCV	radiation control valve
RCW	raw cooling water
RCW	reactor cooling water
RD	random driver
RD	receipt day
RD	requirements document
RD	restricted data
R&D	research and development
RDAT	remote data acquisition terminal
RDDM	reactor deck development mockup
RDH	radioactive drain header
RDOS	real-time disk operating system
RDP	reactor development program
RDSD	reliability design support document
RDT	reactor development and technology
RDT	reactor drain tank
RE	radiation equipment
RE	rare earth
REA	recycle acid
REA	Rural Electrification Administration
REBA	relativistic electron beam accelerator
REC	radiant energy conversion
RECHAR	recombiner charcoal adsorber
RECS	radiological emergency communications system
REETs	radiological effluent and environmental technical specification
REI	request for engineering investigation
REIC	Radiation Effects Information Center

REL	radiation evaluation loops
REL	reactor equipment limited
REMP	radiological environmental monitoring program
REP	radiological emergency plan
REP	resonance escape probability
RER	Radiation Effects Reactor
RER	representatives for experiment review
RERC	radiological emergency response coordination
RERO	radiological emergency response operation
RERP	radiological emergency response planning
RES	Nuclear Regulatory Research, Office of
RESAR	reference safety analysis report
RESL	Radiological and Environmental Sciences Laboratory
RETS	radiological environmental technical specification
REVAB	relief valve augmented bypass
REW	recycle water
RF	radio frequency
RF	release factor
RF	reply finding
RFB	Reaktorbau Forschungs und Baugesellschaft m.b.H. & Co. (Austria)
RFC	recirculation flow control
RFCS	recirculation flow control system
RFI	request for information
RFN	remote filter niche
RFP	reactor feed pump
RFP	request for proposal
RFP	reversed field pinch
RFPT	reactor feed pump turbine
RFQ	request for quotation
RFW	reactor feedwater
RFX	reversed field experiment
RG	regulated gallery
RG	regulatory guide
RG&E	Rochester Gas and Electric Corp.
RGM	radiogas monitor
RGR	rare-gas recovery
RH	relative humidity
RHC	reactor head cooling
RHR	residual heat removal
RHRP	residual heat removal pump
RHRS	residual heat removal system
RHRSW	residual heat removal service water
RHTS	reactor heat transport system
RHX	regenerative heat exchanger
RI	radiation indicator
R&I	removal and installation
RI	resonance integral
RI	reactor island
RIA	reactivity initiated accident
RIA	removable instrument assembly
RIAEC	Rhode Island Atomic Energy Commission
RIDS	receiving inspection data status report

RIDS	regulatory information distribution system
RIENA	Rassegra Internazionale Elettronica Nucleare ed Aerospaziale (Italy)
RII	receiving inspection instruction
RINA	Registro Italiano Navale (Italy)
RIOPR	Rhode Island Open Pool Reactor
RIP	receiving inspection plan
RIPS	radioisotope power supply
RIS	reporting identification symbol
RJE	remote job entry
RKS	Raadet foer Kaernkraftsaekerhet (Sweden)
RL	reactor licensing
RLOP	reactor licensing operating procedure
RLR	radioactive lighting rod
RM	radiation monitor
RM	radiation monitoring
RM	reactor manufacturer
RM	remote manual
RM	Resource Management, Office of
RM	rule making
RMAAS	reactivity monitoring and alarm system
RM&C	reactor monitoring and control
RMC	Radiation Management Corporation
RMC	remote manual control
RMCS	reactor manual control system
RMF	reactivity measurement facility
RMRM	radioactive materials reference manual
RMS	radiation monitoring system
RMS	radiological monitoring system
RMS	regulatory manpower system
RMS	remote manual switch
RMW	reactor makeup water
RMWS	reactor makeup water storage
RMWT	reactor makeup water tank
RO	reactor operator
RO	reportable occurrence
RO	restriction orifice
RO	reverse osmosis
ROD	release order directive
ROI	region of interest
ROM	read only memory
ROP	record of purchase
ROS	requisition on stores
ROW	requisition on warehouse
ROW	right of way
RP	reactor pressure
RP	reactor project
RP	release point
RPAM	regional public affairs manager
RPAS	reactor protection actuating signal
RPC	remote process cell
RPCC	remote process crane cave
RPCS	reactor plant control system

RPD	reactor plant designer
RPDF	radiation protection design feature
RPE	resource planning and evaluation
RPF	region peaking factor
RPF	right panel front
RPG	radiation protection guide
RPG	report program generator
RPI	relative position indication
RPI	rod position indicator
RPIS	rod position indication system
RPIS	rod position information system
RPP	radiation protection plan
RPS	reactor protection system
RPS	regulatory performance summary
RPST	reaction products separator tank
RPT	reactor for physical and technical
RPT	recirculation pump trip
RPV	reactor pressure vessel
R&QA	reliability and quality assurance
RQD	rock quality designation
RR	receiving report
RRA	Radiation Research Associates, Inc.
RRC	radiation recorder controller
RRC	reactor recirculation cooling
RRI	resident reactor inspector
RRRC	Regulatory Requirements Review Committee
RSC	reactor safety coordinator
RSD	relative standard deviation
RSHX	recirculation spray heat exchanger
RSK	Reaktorsicherheitskommission (West Germany)
RSNGS	Rancho Seco Nuclear Generating Station
RSO	radiation safety officer
RSO	reactor system outline
RSP	reactivity surveillance procedure
RSP	remote shutdown panel
RSP	rotating shield plug
RSR	radiological safety review
RSR	reactor safety research
RSS	reactor safety study
RSS	reactor shutdown system
RSSF	retrievable surface storage facility
RSSMAP	Reactor Safety Study Methodology Application Program
RSST	reserve station service transformer
RSW	raw service water
RT	radiographic test
RT	reactor trip
RTC	removable top closure
RTCB	run to cladding breach
RTD	resistance temperature detector
RTD	resistance temperature device
RTD	Röntgen Technische Dienst B. V. (Netherlands)
RTE	residual total elongation
RTG	radioactive thermoelectric generator

RTGB	reactor turbine generator board
RTL	radioisotope transport loop
RTM	regulatory technical memorandum
R/T Net	radio telephone network
RTO	reactor trip override
RTS	reactor trip system
RTS	refueling (water) transfer and storage
RTV	room temperature vulcanizing
R&U	repairs and utilities
RV	reactor vessel
RV	release valve
RV	relief valve
RV	Reactor Venezolano (Venezuela)
RVDP	relief valve discharge piping
RVIS	reactor and vessel instrumentation system
RW	raw water
RW	Ringsdorff-Werke, G.m.b.H. (West Germany)
RW	river water
RWA	radwaste area
RWB	rod withdrawal block
RWC	reactor water cleanup
RWCS	reactor water cleanup system
RWCU	reactor water cleanup
RWDS	radwaste disposal system
RWE	Rheinisch-Westfaelisches Electrizaetswerk A.G. (West Germany)
RWM	rod worth minimizer
RWP	radiation work permits
RWP	radwaste work permit
RWPC	radwaste process cell
RWPH	river water pumphouse
RWR	radioactive waste reduction
RWS	radwaste system
RWSF	radwaste solidification facility
RWSS	radwaste sample station
RWST	refueling water storage tank
RWT	refueling water tank
RWTA	river water treatment area
RWTS	regenerant waste treatment subsystem
RWV	radioactive waste vent

NUREG ACRONYMS AND INITIALISMS

S

SA	safety analysis
SA	service air
S/A	subassembly
S&A	surveillance and accountability
SAAEB	South African Atomic Energy Board
SAD	safety analysis diagram
SAD	safety assurance diagram
SADE	superheat advanced demonstration experiment
SAFDL	specified acceptable fuel design limit
SAFE	safeguards automated facility evaluation
SAFE	Society for the Advancement of Fission Energy
SAFO	Swedish Atomic Forum
SAG	senior advisory group
SAI	Science Applications, Inc.
SAID	safety analysis input data
SALE	safeguards analytical laboratory evaluation
SALP	systematic assessment of licensee performance
SAM	stabilized assay meter
SAM	substitute alloy material
SAMA	Scientific Apparatus Makers Association
SAMIS	structural analysis and matrix inversion system
SAPS	Shippingport Atomic Power Station
SAR	safety analysis report
SAREF	safety research experiment facility
SARP	Severe Accident Research Plan
SARRP	Severe Accident Risk Reduction Program
SAS	secondary alarm station
SAS	security agency study
SAS	service air system
SAS	station air system
SASA	severe accident sequence analysis
SAT	station auxiliary performer
SATNUC	Société pour l'Applications Techniques dans le Domaine de l'Énergie Nucleaire (France)
SAVS	safeguards area ventilation system
SBCS	steam bypass control system
SGBT	standby gas treatment
SGBTS	standby gas treatment system
SBK	Schnell-Brüter-Kernkraftwerksgesellschaft, m.b.H. (West Germany)
SBLC	standby liquid control
SBLOCA	small-break loss-of-coolant accident
SBR	Soviet Breeder Reactor
SBVS	shield building vent(ilation) system
SC	secondary confinement
SC	site contingency
SC	speed controller
SC	surveillance compliance

SCA	secondary control assembly
SCA	simulated core assembly
SCA	single-channel analyzer
SCA	sneak circuit analysis
SCBA	self-contained breathing apparatus
SCBR	steam-cooled breeder reactor
SCC	secondary chemical control system
SCC	stress corrosion cracking
SCCS	sodium chemistry control system
SCCS	standby core cooling system
SCD	significant construction deficiency
SCDMR	steam-cooled deuteriated water-moderated reactor
SCE	saturated calomel electrode
SCE	Southern California Edison Co.
SCEAR	Scientific Committee on the Effects of Atomic Radiation
SCEG	South Caroline Electric and Gas Co.
SCEL	small-component evaluation loop
SCF	sodium cleaning facility
SCFBR	steam-cooled fast breeder reactor
SCGA	sodium-cooled graphite assembly
SCHS	small-component handling system
SCK	Studiecentrum voor Kernenergie (Belgium)
SCM	simulated core mockup
SCM	simulated core model
SCM	steam condensing mode
SCN	specification change notice
SCOA	sample cave operating area
SCORE	Standing Committee on Regulatory Effectiveness
SCPPS	secondary containment purge and pressure control system
SCR	selenium control rectifier
SCR	silicon-controlled rectifier
SCR	sodium-cooled reactor
SCRD	secondary control rod driveline
SCRDM	secondary control rod drive mechanism
SCRM	secondary certified reference material
SCRS	secondary control rod system
SCRWC	Sierra Club Radioactive Waste Campaign
SCS	secondary coolant system
SCS	shutdown cooling system
SCS	sodium characterization system
SCS	Soil Conservation Service
SCSHX	shutdown cooling system heat exchange
SCSI	Southern Company Services, Inc.
SCSIN	Service Central de Sûreté des Installations Nucléaires (France)
SCTA	secondary container transfer area
SCTF	sodium chemical technology facility
SCTI	Sodium Component Test Installation
SCTL	small components test loop
SCUMRA	Société Centrale de l'Uranium et des Minéraux et Métaux Radioactifs (France)
SCV	steel containment vessel
SD	scram discharge

SD	shakedown
SD	shutdown
S/D	shutdown
SD	supply duct
SDA	supplier data approval
SDBCS	steam dump bypass control system
SDBU/CR	Small and Disadvantaged Business Utilization and Civil Rights, Office of
SDC	shield design code
SDC	shutdown cooling
SDC	structural design criteria
SDCC	small-diameter component cask
SDCS	shutdown cooling system
SDD	system design description
SDEM	Société d'Enterprise de Montages (France)
SDGE	San Diego Gas and Electric Co.
SDLC	synchronous data link control
SDM	shutdown margin
SDOF	single-degree-of-freedom
SDP	set-down pool
SDR	significant deficiency report
SDS	steam dump system
SDS	submerged demineralizer system
SDV	scram discharge volume
SE	safety evaluation
SE	shift engineer
SE	subcritical experiment
SEA	Susquehanna Environmental Advocates
SEAONC	Structural Engineers Association of Northern California
SEAR	safety evaluation audit report
SEAS	Strategic Environmental Assessment Systems
SEASET	separate effects and systems effects test
SECC	Safe Energy Communication Council
SECHT	scoping emergency cooling heat transfer
SECY	Secretary, Office of the
SEEN	Syndicat d'Etudes de l'Énergie Nucléaire (Belgium)
SEFOR	Southwest Experimental Fast Oxide Reactor
SEFR	Shielding Experiment Facility Reactor
SELNI	Società Elettronucleare Italiana (Italy)
SELO	Società Elettronica Lombarda (Italy)
SEM	scanning electron microscope
SEMO	Société Belgo-Française d'Énergie Nucléaire Mosane (Belgium)
SENA	Société d'Énergie Nucléaire Franco-Belge des Ardennes (France)
SENN	Società Elettronucleare Nazionale (Italy)
SENTA	Société d'Études Nucléaires et de Techniques Avancées (France)
SEP	site emergency plan
SEP	Systematic Evaluation Program
SER	safety evaluation report
SER	Sandia Engineering Reactor
SERC	Southeastern Electric Reliability Council

SERF	Sandia Engineering Reactor Facility
SERF	special environmental radiometallurgy facility
SERR	semiannual (radwaste) effluent release report
SES	steam electric station
SET	systems effects test
SETS	standardized environmental technical specification
SETU	Société d'Études et de Travaux pour l'Uranium (France)
SEUSSN	Southeastern United States Seismic Network
SF	source factor
SF	spent fuel
SFA	single failure analysis
SFA	standard fuel assembly
SFAS	safety features actuation signal
SFBI	spent fuel building isolation
SFCR	storage facility control room
SFCS	secondary flow control system
SFCS	spent fuel cooling system
SFCSR	storage facility cable spreading room
SFEN	Société Française d'Energie Nucléaire (France)
SFP	spent fuel pit
SFP	spent fuel pool
SFPAVS	spent fuel pool area ventilation system
SFPCCS	spent fuel pool cooling and cleanup system
SFPCS	spent fuel pool cooling system
SFRCS	steam and feedwater line rupture control system
SFRCS	steam and feedwater rupture control system
SFRP	Société Française de Radioprotection (France)
SFS	steam and feedwater system
SFSP	spent fuel storage pool
SFTA	spent fuel transportation accident
SFTT	spent fuel transfer tube
SG	safety guide
SG	steam generator
S/G	steam generator
SGAE	Studiengesellschaft für Atomenergie, G.m.b.H. (Austria)
SGAHRs	steam generator auxiliary heat removal system
SGAS	steam generator available signal
SGB	steam generator blowdown
SGB	steam generator building
SGBD	steam generator blowdown
SGBPS	steam generator blowdown processing system
SGBS	steam generator blowdown system
SGE	Société Générale d'Enterprises (France)
SGHWR	steam-generating heavy-water reactor
SGIS	safeguards initiation signal
SGLIC	steam generator level instrumentation cabinet
SGMSR	steam generator maximum steam rate
SGN	Société de Génie Nucléaire (France)
SGOG	Steam Generators Owners Group
SRG	self-generation reactor
SGR	sodium-graphite reactor
SGS	Salem Generating Station
SGS	segmented gamma scanner

SGS	steam generator system
SGTF	steam generator test facility
SGTR	steam generator test rig
SGTR	steam generator tube rupture
SGTS	standby gas treatment system
SGWLC	steam generator water level control
SHA	sodium hydroxide addition
SHA	solid homogeneous assembly
SHAA	sealed head access area
SHARE	systems for heat and radiation energy
SHE	semi-homogeneous experiment
SHF	storage-handling facility
SHI	Sumitomo Heavy Industries, Lt. (Japan)
SHMED	State Hazardous Materials Enforcement Development
S/HNP	Skagit/Hanford Nuclear Project
SHNPP	Shearon Harris Nuclear Power Plant
SHRS	shutdown heat removal system
SHTL	small heat-transfer loop
SI	safety injection
SI	special instruction
SI	surveillance inspection
SIAS	safety injection actuation signal
SICN	Société Industrielle de Combustible Nucléaire (France)
SICS	safety injection control system
SID	sodium ionization detector
SIGEN	Società Impianti Generazione Energia Nucleare, SpA (Italy)
SICS	safety injection control system
SIHP	Sargent Industries, Huntington Park
SIMEA	Società Italiana Meridionale Energia Atomica (Italy)
SIN	Schwerezersches Institut für Nuklearforschung (Switzerland)
SINB	Southern Interstate Nuclear Board
SIO	Società per l'Industria dell'Ossigeno e de Altri Gas (Italy)
SIPI	Scientists' Institute for Public Information
SIR	safeguards implementation report
SIR	submarine intermediate reactor
SIRW	safety injection and refueling water
SIRWT	safety injection and refueling water tank
SIS	safety injection system
SISI	surveillance and in-service inspection
SIT	safety injection tank
SIT	safety injection transmitter
SITP	site inspection and test procedure
SJAE	steam jet-air ejector
SJWCP	skid jacket water cooling pump
SKA	Studienkommission für Atomenergie (Switzerland)
SL	safety limit
S&L	Sargent & Lundy Engineers
SL	section leader
SL	stationary low
SLAC	Stanford Linear Accelerator Center
SLB	steamline break
SLC	standby liquid control

SLCRS	supplementary leak collection and release system
SLCS	standby liquid control system
SLD	shutdown logic diagram
SLI	steamline isolation
SLIV	steamline isolation valve
SLO	single loop operation
SLO	State liaison officer
SLP	St. Lucie Plant
SLPS	State and local program support
SLSF	sodium loop safety facility
SLUC	standard level user charge
SLWMS	secondary liquid waste management system
SM	stationary medium (power plant)
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SMAW	submerged metal arc weld
SMBDB	structural margin beyond design basis
SMC	segmented maintenance cask
SMR	Shield Mock-up Reactor
SMR	solid moderated reactor
SMTI	sodium mechanisms test installation
SMSA	standard metropolitan statistical area
SMUD	Sacramento Municipal Utility District
S/N	serial number
SNAME	Society of Naval Architects and Marine Engineers
SNAP	shielded neutron assay probe
SNAP	Struthers Nuclear Process Co.
SNAP	systems for nuclear auxiliary power
SNE	Sociedad Nuclear Española (Spain)
SNEC	Saxton Nuclear Experimental Corp.
SNEC	subgroup on nuclear export coordinatioén
SNERP	Saxton Nuclear Experimental Reactor Project
SNG	synthetic natural gas
SNI	Società Nucleare Italiana (Italy)
SNM	Society for Nuclear Medicine
SNM	special nuclear material
SNP	Skagit Nuclear Project
SNPP	Sequoyah Nuclear Power Plant
SNPS	Shoreham Nuclear Power Station
SNR	slow neutron reactor
SNR	supplier nonconformance report
SNS	Seabrook Nuclear Station
SNUPPS	Standardized Nuclear Unit Power Plant System
SO	Siemens Osterreich (Austria)
SOCCS	summary of component control status
SOCIA	Sociétépour l'Industrie Atomique (France)
SOD	Société d'Etudes pour l'Obtention due Deuterium (France)
SODERN	Society d'Etudes et Realisations Nucleaires (France)
SOE	sequence of events
SOICS	summary of installation control status
SOL	senior operator license
SOM	shift operations manager
SONGS	San Onofre Nuclear Generating Station

SOP	standard operating procedure
SOPR	Spanish Open Pool Reactor
SOPREN	Società Progettazione Reattori Nucleari, SpA (Italy)
SORC	Station Operations Review Committee
SORIN	Società Ricerche Impianti Nucleari (Italy)
SP	State Programs, Office of
SP	sampling point
SP	security procedure
SP	setpoint
SP	special project
SP	special purpose
SP	surveillance procedure
SPACS	sodium purification and characterization system
SPC	standby pressure control
SPC	stored program controller
SPDS	safety parameter display system
SPERT	special power excursion reactor test
SPES	Simulazione PWR per Esperienze di Sicurezza (Italy)
SPF	site population factor
SPF	standard project flood
SPGD	self-powered gamma detector
SP/HD	spool piece head
SPI	site population index
SPIAM	sodium purity in-line analytical module
SPIN	Società per Imprese Nucleare, SpA (Italy)
SPMS	suppression pool makeup system
SPND	self-powered neutron detector
SPOUT	system peripheral output utility
SPR	Sandia Pulsed Reactor
SPRF	Sandia Pulsed Reactor Facility
SPS	secondary plant system
SPS	standard project storm
SPS	Summit Power Station
SPS	supplementary protection system
SP/SC	shield plug/support cylinder
SPSC	Southwestern Public Service Co.
SPSS	shield plug storage station
SPT	special purpose test
SPT	standard penetration test
SPTF	sodium pump test facility
SPV	storage process vent
SPVR	storage process vent room
SPX	superheat power experiment
SQR	supplier quality representative
SQRT	Seismic Qualification Review Team
S/R	safety relief
SR	safety rod
SR	source range
SR	support reaction load
SR	surveillance requirement
SRB	Safety Review Board
SRBT	single-rod burst test
SRC	Science Research Council (United Kingdom)

SRC	shutdown reactor cooling
SRC	spares receiving checklist
SRCAS	safety-related control air system
SRCI	safety-related control and instrumentation
SRD	shipper-receiver difference
SRDA	sodium removal development apparatus
SRDI	safety-related display instrumentation
SRE	Sodium Reactor Experiment
SRFM	source range flux monitor(ing)
SRGS	St. Rosalie Generating Station
SRH	switchyard relay house
SRHC	shutdown reactor head cooling
SRI	senior resident inspector
SRI	Stanford Research Institute
SRIAER	Scientific Research Institute for Atomic Energy Reactors (USSR)
SRM	source range monitor
SRM	standard reference material
SRO	senior reactor operator
SRO	specification release order
SROA	safety-related operator action
SRP	Savannah River Plant
SRP	Standard Review Plan
SRP	small rotating plug
SRRC	Standing Results Review Committee
SRS	sodium removal station
SRS	solid radwaste system
SRSS	square root of the sum of the squares
SRT	special review team
SRT	spent resin tank
SRTI	Société de Recherches Techniques et Industrielles (France)
SRU	Société de Raffinage d'Uranium (France)
SRV	safety/relief valve
SRVDL	safety/relief valve discharge line
SRWS	solid radioactive waste system
SS	safe shutdown
SS	sample sink
SS	sample station
SS	sampling system
SS	shift supervisor
SS	site safety
SS	site suitability
SS	Southern Services, Inc.
SS	special source
SS	speed sensor
SS	stainless steel
SSAR	site safety analysis report
SSAS	small sample assay system
SSAR	standard safety analysis report
SSB	source selection board
SSC	short segmented cask
SSC	structures, systems, and components
SSCA	spray system compressed air

SSCCS	solid state component control system
SSCR	spectral shift control reactor
SSE	safe-shutdown earthquake
SSEB	Southern States Energy Board
SSER	site safety evaluation report
SSER	supplement to safety evaluation report
SSES	Susquehanna Steam Electric Station
SSF	safe shutdown facility
SSF	service storage facility
SSF	standby shutdown facility
SSI	safe shutdown impoundment
SSI	steady-state irradiation
SSK	Strahlenschutzkommission (West Germany)
SSLPS	solid-state logic protection system
SSMRP	seismic safety margins research program
SSNM	strategic special nuclear material
SSNPP	small-size nuclear power plant
SSP	sodium sampling package
SSP	staff site position
SSP	static sodium pot
SSPB	Swedish State Power Board
SSPS	solid state protection system
SSPWR	small-size pressurized-water reactor
SSR	seal steam regulator
SSR	separate superheater reactor
SSR	site suitability report
SSR	specification status report
SSRCR	suggested state regulations for the control of radiation
SSS	secondary sampling system
SSS	sensitized stainless steel
SSS	shield and seismic support
SSS	special safeguards study
SSST	site suitability source term
SST	secondary surge tank
SST	station service transformer
SS/T	steady-state/transient
SSW	standby service water
SSWP	station service water pump
SSWS	standby service water system
ST	speed transmitter
STA	Science and Technology Agency (Japan)
STA	shift technical advisor
STAR	shield test air reactor
STAR	space thermionic auxiliary reactor
STCL	source-term control loop
STE	Shield Test Experiment
STE	shift technical engineer
STE	system test engineer
STEC	South Texas Electric Cooperative, Inc.
STEP	safety test engineering program
STF	safety test facility
STF	shield test facility
STIF	short-term irradiation facility

STIR	Shield Test and Irradiation Reactor
STL	site team leader
STP	short-term program
STP	South Texas Project
STP	standard temperature and pressure
STP	system test procedure
STPF	shield test pool facility
STR	submarine thermal reactor
STRIDE	standard reactor island design
STS	standard technical specifications
STV	small test vessel
S/U	startup
SUNY	State University of New York
SUPO	Super Power Water Boiler
SUR	startup rate
SUS	startup system
SUT	startup transformer
SV	safety valve
SV	solenoid valve
SV	stop valve
SVA	single-valve first-actuation
S&W	Stone and Webster Engineering Corp.
SW	service water
SWBS	solid waste barrel storage
SWC	solid wastes cask
SWCS	salt water cooling system
SWEC	Stone and Webster Engineering Corp.
SWESSAR	Stone and Webster Standard Safety Analysis Report
SWET	simulated water entry test
SWM	Serber-Wilson method
SWMS	solid waste management system
SWO	stop work order
SWP	service water pump
SWP	solid waste packaging
SWP	solid waste processing
SWPP	Southwest Power Pool
SWPS	solid waste processing system
SWR	service water reservoir
SWR	sodium-water reaction
SWR	submarine water reactor
SWRI	Southwest Research Institute
SWRPRS	sodium-water reaction pressure relief subsystem
SWS	service water system
SWS	solid waste system
SWSR	solid waste shipping room
SWTS	secondary waste treatment system
SWU	separative work unit
SX	solvent extraction
SXF	solvent extraction feed
SYCA	Syndicat d'Étude des Centrales Atomique (Belgium)
SYRFA	Société de Système Française pour les Réacteurs Avances

NUREG ACRONYMS AND INITIALISMS

T

TA	transfer aisle
TAC	technical assistance contract
TAC	technical assignment control
TACS	technical assignment control system
TACS	test assembly conditioning station
TAEC	Thailand Atomic Energy Commission
TAF	top of active fuel
TAG	test assembly grapple
TAIC	Tokyo Atomic Industrial Consortium
TAL	transporter air lock
TAML	Taunton Minicipal Lighting Plant
TAP	thermal analyzer program
TAR	technical assistance request
TARGET	thermal advanced gas-cooled reactor exploiting thorium
TASC	Technical Activity Steering Committee
TAUF	test assembly unloading fixture
TAVS	turbine area ventilation system
TAWC	Tennessee-American Water Co.
TB	total body
TB	turbine building
TBCCW	turbine building closed cooling water
TBESI	turbine building exhaust system isolation
TBP	tributyl phosphate
TBS	turbine bypass system
TBSCCW	turbine building secondary closed cooling water
TBV	turbine building ventilation
T/C	thermocouple
TC	temperature controller
TC	transfer canal
TCA	thermal critical assembly
TCC	Transducer Control Corporation
TC/LD	thermocouple/lead detector
TCS	telephone conference summary
TCS	temporary conditioning station
TCS	turbine control system
TCV	temperature control valve
TCV	turbine control valve
TD	theoretical density
TD	time delay
TD	transfer dolly
TDAFP	turbine-driven auxilliary feed pump
TDAFWP	turbine-driven auxilliary feedwater pump
TDC	thermal diffusion coefficient
TDCR	test deficiency change request
TDO	test design description
TDEFWP	turbine-driven emergency feedwater pump

TDF	task deletion form
TDH	total dynamic hand
TDI	Transamerica Delaval, Inc.
TDI	turbine disk integrity
TDM	time division multiplex
TDR	technical data report
TDR	test deficiency report
TDR	time domain reflectometry
TDS	time delay switch
TDS	total dissolved solids
TE	temperature element
TE	test exception
TE	thermal expansion
T/E	thermoelectric
TE	transient event
TEC	Technology for Energy Corp.
TEC	total estimated cost
TECHNICATOME	Société Technique pour l'Énergie Atomique (France)
TEG	thermoelectric generator
TEM	transmission electron microscope
TEMA	Tank Equipment Manufacturers Association
TEMA	Tubular Exchangers Manufacturers Association
TENR	technologically enhanced naturally radioactive
TENRAP	technologically enhanced naturally radioactive products
TEP	Tyrone Energy Park
TER	technical evaluation report
TES	Teledyne Engineering Services
TFANP	Task Force Against Nuclear Pollution
TFE	thermionic fuel element
TFS	turbine first stage
TG	turbine generator
T/G	turbine generator
TGB	turbine generator building
TGEP	turbine generator emergency power
TGLM	task group lung model
TGS	turbine generator system
TGSS	turbine gland sealing system
TGV	turbine governor valve
T/H	thermal and hydraulic
THCS	temperature of hot channel sodium
THTF	thermal hydraulic test facility
THTR	thorium high-temperature reactor
TI	temperature indicator
TI	temporary instruction
TI	text instruction
TIBB	Tecnomasio Italiano Brown Boveri, SpA (Italy)
TIC	Technical Information Center
TIC	temperature-indicating controller
TID	total integrated dose
TIF	task initiation force
TIF	task initiation form
TIG	tungsten inert gas
TIP	transient in-core probe

TIP	traveling in-core probe
TIP	traversing in-core probe
TIS	temperature-indication switch
TL	task leader
TL	test load
TL	truck lock
TLD	termoluminescent dosimeter
TLEC	Texas-Louisiana Electric Cooperation
TLLM	temperature and liquid level monitor
TLOS	turbine lube oil system
TLOST	turbine lube oil storage tank
TLP	top load pad
TLP	top load plane
TLTA	two-loop test apparatus
TLTM	third-level thermal margin
TLV	threshold limit value
TM	technical manual
TM	temperature monitor
TMBOB	thermal margine beyond design basis
TMD	transient mass distrution
TMH	trolley-mounted hoist
TMI	Three Mile Island
TMI-1	Three Mile Island Unit 1
TMI-2	Three Mile Island Unit 2
TMIA	Three Mile Island Alert, Inc.
TMINS	Three Mile Island Nuclear Station
TMIPO	Three Mile Island Program Office
TM/LP	thermal margin/low pressure
TMR	Teledyne Materials Research
TNP	Trojan Nuclear Plant
TNPG	The Nuclear Power Group (United Kingdom)
TOED	Toledo Edison Co.
TOP	transient overpower
TOPO	trioctylphosphine oxide
TOPR	Taiwan Open Pool Reactor
TOS	torque overload switch
TOSS	transient and/or steady state
TOV	Technischer Oberwachungsverin, e.V. (West Germany)
TP	test pressure
TP	test procedure
TPC	Taiwan Power Company
TPD	test procedure deviation
TPF	total peaking factor
TPM	thermal power monitor
TPPEP	Turkey Point Performance Enforcement Program
TPS	Turkey Report Station
TR	technical review
TR	temperature recorder
TR	topical report
TR	tritium recovery
TRA	tubular reactor assembly
TRB	Technical Review Committee
TRB	Test Review Board

TRC	The Radiochemical Centre, Ltd., (United Kingdom)
TRE	total rare earths
TRIA	temperature-removable instrument assembly
TRIGA	training reactor and isotopes production, General Atomic
TRR	test and research reactor
TRR	Thailand Research Reactor
TRR	topical report request
TRR	topical report review
TRRT	test results from review team
TRS	thermal reactor safety
TRT	technical review team
TRU	transuranic
TRU	transuranium
TRX	two-region physics critical experiment
TS	technical specification
TS	test specification
TS	treatment system
TSA	tube support assembly
TSC	technical support center
TSC	test shipping cask
TSCF	task schedule change form
TSF	tower shield(ing) facility
TSH	temperature switch, high
TSM DA	test section meltdown accident
TSO	time-sharing option
TSP	trisodium phosphate
TSP	tube support plate
TSR	thermal shock rig
TSR	total stress range
TSR	tower shielding reactor
TSSC	Toxic Substances Strategy Committee
TSV	turbine stop valve
TSW	turbine-building service water
TT	temperature transmitter
TT	test temperature
TTA	thenyltrifluoroacetone
TTC	test transfer cask
TTE	thermal transplant equipment
TTF	transient time flowmeter
TTHE	thermal transient histogram equivalent
TTP	test transfer port
TTQAP	Teletherapy Treatment Quality Assurance Port
TTR	thermal test reactor
TTV	tenth thickness value
TTWB	turbine trip with bypass
TU	Texas Utilities Company
TUEC	Texas Utilities Electric Co.
TUFCOF	Thorium-Uranium Fuel Cycle Development Facility
TUGCO	Test Utilities Generating Co.
TUS	Texas Utilities Services, Inc.
TUV	Technischer Überwachungs-Verein, e.V. (West Germany)
TVA	Tennessee Valley Authority
TVO	Teollisuuden Voima Osakeyhtio (Finland)

TVR
TWG
TWX
TZM

Tennessee Valley Region
test working group
teletypewriter exchange service
tantalum-zirconium-molybdenum

NUREG ACRONYMS AND INITIALISMS

U

UAP	uranyl ammonium phosphate
UBAEC	Union of Burma Atomic Energy Centre
UBC	Uniform Building Code
UCL	upper control limit
UCLA	University of California, Los Angeles
UCLR	University of California, Lawrence Radiation Laboratory
UCS	Union of Concerned Scientists
UOI	Utility Data Institute
UDRPS	ultrasonic data recording and processing system
UE	Union Electric Co.
UEF	upper and fitting
UEL	upper electrical limit
UF	urea-formaldehyde
UFTR	University of Florida Teaching Reactor
UGS	upper group stop
UGS	upper guide structure
UHF	ultra-high frequency
UHI	upper-head injection
UHN	uranyl hexahydrate nitrate
UHS	ultimate heat sink
UHTREX	Ultra High Temperature Reactor Experiment
UHV	ultra high voltage
UI	United Illuminating
UIS	upper internals structure
UISJM	upper internals structure jacking mechanism
UKAEA	United Kingdom Atomic Energy Authority
UKNR	University of Kansas Nuclear Reactor
UL	Underwriters Laboratories, Inc.
UL	upper level
ULD	unit load demand
UMBR	University of Missouri Research Reactor
UMTR	University of Maryland Teaching Reactor
UN	uranyl nitrate
UNC	United Nuclear Corp.
UND	uranyl nitrate distillate
UNE	Union Electric Co.
UNH	uranyl nitrate hexahydrate
UNHC	uranyl nitrate hexahydrate cell
UNI	United Nuclear Industries, Inc.
UNIT	United Illuminating
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
UNWMG	Utility Nuclear Waste Management Group
UO	unit operator
UOGF	uranium off-gas filter
UOP	unit operating procedure
UPI	upper plenum injection
UPL	Utah Power and Light Co.
UPL	uranium product loadout

UPM	universal permissive module
UPPS	ultimate plant protection system
UPR	uranium production reactor
UPS	uninterruptible power supply
UPS	uninterruptible power system
UPTF	upper plenum test facility
UR	user requirement
URA	Universities Research Association
URA	uranium recycle acid
URAEP	University of Rochester Atomic Energy Project
URC	ultrasonic resin cleaner
URD	underground residential distribution
URG	unit review group
USAEC	U.S. Atomic Energy Commission
USAS	United States of America Standards
USBR	U.S. Bureau of Reclamation
U.S.C.	U.S. Code
USCG	U.S. Coast Guard
USC&GS	U.S. Coast and Geodetic Survey
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USI	unresolved safety issue
USNDC	U.S. Nuclear Data Committee
USNRC	U.S. Nuclear Regulatory Commission
USP	upper sequential permissive
UST	United States Testing Co.
USWB	U.S. Weather Bureau
UT	ultrasonic testing
UT	universal time
UTM	universal transverse mercator
UTR	university training reactor
UTRR	University of Teheran Research Reactor
UU	ultimate user
UV	undervoltage
UVAR	University of Virginia Reactor
UVR	University of Virginia Reactor
UVSC	uranium ventilation scrubber cell
UWRR	University of Wyoming Research Reactor
UWTR	University of Washington Training Reactor

NUREG ACRONYMS AND INITIALISMS

V

VA	vital area
VAK	Versuchsatomkraftwerk Kahl (West Germany)
VAN	value-added network
VBMR	ventilation barrier machine room
VBWR	Vallecitos Boiling Water Reactor
VC	vaporizer concentrate
VCLF	vertical cask-lifting fixture
VCM	vinyl chloride monomer
VCT	volume control tank
VD/OS	vacuum distillation/overflow sampler
VDC	ventilation duct chase
VDEW	Vereinigung Deutscher Elektrizitätswerke (West Germany)
VDTUV	Vereinigung der Technischen Überwachungs-Vereine, e.V. (West Germany)
VE	Vitro Engineering
VEC	vertical electrical chase
VEPC	Virginia Electric and Power Co.
VESIAC	Vela Seismic Information and Analysis Center
VESR	Vallecitos Experimental Superheat Reactor
VF	vaporizer feed
VGCH	vent gas collection header
VHES	Vitro Hanford Engineering Service
VHF	very high frequency
VHTR	very high temperature reactor
VI	vent isolation
VIMS	Virginia Institute of Marine Science
VIV	variable Inlet vane
VNSP	vacant nozzle shield plug
VOG	vessel off-gas
VOT	valve opening time
VOTA	vibration open test assembly
VP	vent-clearing pressure
VPI	vapor phase inhibitor
VQAR	vendor quality assurance representative
VR	volume reduction
VRS	vacuum relief system
VS	vapor suppression
VS	virtual storage
VSE	vessel, steam explosion in
VSNS	Virgil C. Summer Nuclear Station
VSR	Vallecitos Superheat Reactor
VST	valve setpoint tolerance
VTEC	Vermont Electric Cooperative, Inc.
VTEP	Vermont Electric Power Co., Inc.
VTT	Valtion Teknillinen Tutkimuskeskus (Finland)

VWE
VWED
VWO
VYNP
VYNPS

vanadium wire equilibration
vanadium wire equilibration device
valves wide open
Vermont Yankee Nuclear Power Co.
Vermont Yankee Nuclear Power Station

NUREG ACRONYMS AND INITIALISMS

W

<u>W</u>	Westinghouse Electric Corporation
WAGR	Windscale Advanced Gas-cooled reactor (United Kingdom)
<u>W</u> -AL	Westinghouse-Astronuclear Laboratory
<u>W</u> ard	Westinghouse Advanced Reactors Division
WB	whole body
WBNP	Watts Bar Nuclear Plant
WBNS	water-boiler neutron source
WBS	work breakdown structure
WC	weather condition
WCA	whole-cure accident
WCF	waste-calcinating facility
WCGS	Wolf Creek Generating Station
WCS	waste compaction station
WD	waste disposal
WD	withdrawn
WDC	waste disposal cask
WDS	waste disposal system
<u>W</u> DTRS	Westinghouse development test requirement specification
WEC	Wolverine Electric Cooperative
WECST	waste evaporator condensate storage tank
WEP	water-extended polyester
WESF	Waste Encapsulation Storage Facility
WFMC	welding filler material control
WG	waste gas
WG	water gauge
WGC	waste gas compressor
WGDS	waste gas disposal system
WGDT	waste gas decay tank
WGS	waste gas system
WGS	Waterford Generating Station
<u>W</u> HC	Westinghouse Hanford Company
WHO	World Health Organization
WIEB	Western Interstate Energy Board
WIEP	Wisconsin Electric Power Co.
WINB	Western Interstate Nuclear Board
WIPP	Waste Isolation Pilot Plant
WISE	World Information Service on Energy
WISHA	Washington Industrial Safety and Health Act
WITS	work item tracking system
WKB	Wentzel-Kramers-Brillouin
WLM	working-level month
WMEC	Western Massachusetts Electric Co.
WMM	wall-mounted manipulator
WMO	World Meteorological Organization (Switzerland)
WMPC	Wisconsin Michigan Power Co.
WMS	waste management system
WNFM	World Nuclear Fuel Market
WNP	Washington Nuclear Plant
WNT	waste neutralization tank

WNT	waste neutralizing tank
WNYNRC	Western New York Nuclear Research Center
WOFA	Westinghouse optimized fuel assembly
WOG	Westinghouse Owners Group
WP	warm pipe
WP	welding procedure
WP	work procedure
WPB	waste processing building
WPBCWS	waste processing building chilled water system
WPC	Werner and Pfleiderer Corp.
WPLC	Wisconsin Power and Light Co.
WPPSS	Washington Public Power Supply System
WPQR	welding procedure qualification record
WPS	waste processing system
WPS	welding procedure specification
WPSC	Wisconsin Public Service Corp.
WQC	water quality certification
WR	Whiteshell Reactor (Canada)
WR	wide range
WRAP	water reactor analysis program
WRC	Welding Research Council
<u>W</u> -RM	Westinghouse as reactor manufacturer
WRM	wide range monitor
WRM	working reference manual
WRRR	Walter Reed Research Reactor
WRSR	water reactor safety research
WS	warm shop
WSCC	Western Systems, Coordinating Council
WSCS	waste solidification and compaction station
WSD	working stress design
WSES	Waterford Steam Electric Station
WSF	Waste shipping facility
WSUOPR	Washington State University Open-Pool Reactor
WT	wall thickness
WTF	waste treatment facility
WTF	waste water treatment facility
WTP	water treatment plant
WTR	Westinghouse test Reactor
WVN	water vapor nitrogen
WW	well water
WWPC	Washington Water Power Co.
WWS	well water system
WZNPS	William H. Zimmer Nuclear Power Station

NUREG ACRONYMS AND INITIALISMS

X

XLPE	cross-linked polyethylene
XFR	X-ray fluorescence
XR	export reactor

Y

YAE	Yankee Atomic Electric Co.
YATA	York Area Transportation Authority
YCNP	Yellow Creek Nuclear Plant
YNPS	Yankee Nuclear Power Station

Z

ZEA	zero energy assembly
ZEEP	Zero Energy Experimental Pile (Canada)
ZES	zero energy system
ZETA	Zero Energy Thermonuclear Apparatus (United Kingdom)
ZETR	Zero Energy Thermal Reactor (United Kingdom)
ZEUS	Zero Energy Uranium System (United Kingdom)
ZGS	zero gradient synchrotron
ZNP	Zion Nuclear Plant
ZPA	zero period acceleration
ZPPR	Zero Power Plutonium Reactor
ZPR	Zero Power Reactor
ZPRF	Zero Power Reactor Facility
ZPSS	Zion Probabilistic Safety Study
ZTO	zero time outage
ZWOK	zirconium-water oxidation kinetics



The Rocky Flats Dictionary

**INSTITUTE OF NUCLEAR
POWER OPERATIONS**

INPO DEFINITIONS —

A REFERENCE GUIDE

Second Edition

INSTITUTE OF NUCLEAR POWER OPERATIONS (INPO) DEFINITIONS

INTRODUCTION

This section is a compilation of terms, and their definitions from INPO documents.

The reference for each definition is provided so the reader can determine the context in which the term is used by INPO. The reference is identified in parentheses immediately following each definition.

When more than one definition is provided, the preferred usage is not implied by the sequence in which the definitions appear. If two or more references are listed with definitions that contain minor differences in wording (so as not to warrant listing as separate definitions), then the difference and its respective reference are underlined. Three periods (...) are used when a reference also contains all of the definition immediately preceding it. The intent is to provide the exact definition as found in the reference source.

INPO DEFINITIONS

A

10CFR50.59 evaluation

A regulatory requirement, the primary function of which is to determine if an unreviewed safety question exists relative to selected equipment, and whether or not prior NRC approval of the change is required. (85-016, Rev. 1)

Abbreviated lesson

A lesson that highlights the primary issues in emergency planning and serves as a summary or overview for persons whose responsibilities do not require a concentrated study of the issues. An abbreviated lesson will take about 45 minutes to one hour. (EP-804)

Abnormal/unusual condition

Any condition that is not normal for the present condition of the plant or system. (84-030, Rev. 1)

Accept tag

The final receipt inspection identifier affixed to an item prior to placing the item in storage. It indicates all purchase requirements have been met. (85-023)

Accreditation self-evaluation

An evaluation of utility training programs measured against the accreditation objectives and criteria, conducted by the utility, and described in a written report. (ACAD 90-025)

Accreditation team

A group of individuals representing INPO with collective expertise in nuclear power plant operations, nuclear utility training, instructional processes, and training evaluation. This team reviews the utility's self-evaluation report, visits training sites, evaluates training, and prepares a report of its observations and recommendations. (ACAD 90-025)

Action plan

A sequence of scheduled actions and milestones that illustrates the planned method of achieving a given objective. (86-019)

Active license

Active license

The license held by an individual assigned responsibility for the following:

- performing the functions of a licensed operator or a senior licensed operator on shift, with responsibility for a minimum of three shifts or seven 8-hour or five 12-hour shifts per calendar quarter
- attending and successfully completing the requirements of the continuing training program.

(86-025, Rev. 1)

Active simulator exam

A comprehensive evaluation of the licensed operator's integrated knowledge and skills using a simulator in a real-time environment. Active license

The license held by an individual assigned responsibility for the following:

- performing the functions of a licensed operator or a senior licensed operator on shift, with responsibility for a minimum of three shifts per calendar quarter
- attending and successfully completing the requirements of the continuing training program.

(86-025, Rev. 1)

Activity network

The system by which products resulting from the EOPIA Review Group are developed and reviewed by the representatives of the nuclear industry.

(82-013)

Air in-leakage

The amount of "free air" discharged from the condenser air removal system. Free air is air at atmospheric pressure and room temperature.

(84-035, Rev. 1)

Auxiliary operator, class C

ALARA committee

The station committee that has responsibility for overall coordination of the ALARA program. The committee is composed of members from the major functional departments and meets on a regular basis to review the status of the ALARA program. Committee members also review exposure reduction plans for specific jobs with estimates of 25 man-rem or greater. (82-001-OEN-08A)

ALARA engineer

A staff position or positions within the Radiological Protection Department with functional authority for implementation of the ALARA program and maintenance of the necessary records and data bases. (82-001-OEN-08A)

Approved chemical list

An approved chemical list is defined here as an approved list of chemicals to be used on site. The list shall contain information denoting the category of chemical and the issue quantity. The list shall be approved by the chemistry manager and site safety supervisor. Table I presents a sample list. (85-021)

Area turnover

The turnover of area-associated items from one organization to another, such as lighting, floors, walls, and electric utility circuits. (CP-201)

Atmospheres immediately hazardous to life

Atmospheres that do not meet the air quality criteria of this procedure (per Section 6.2.6). (83-032)

Auxiliary operator, class A

That classification of operator within a nuclear power plant who usually performs the typical duties outlined in section 3.1 of this document. (GPG-04)

Auxiliary operator, class B

That classification of operator within a nuclear power plant who usually performs the typical duties outlined in section 4.1 of this document. (GPG-04)

Auxiliary operator, class C

That classification of operator within a nuclear power plant who usually performs the typical duties outlined in section 5.1 of this document. (GPG-04)

Availability block diagram analysis

Availability block diagram analysis

An analytical technique for assessing system unavailability, using block diagrams to represent the functional relationships among components in a system. Successful system operation is determined by the way the blocks are interconnected in the block diagram. (86-021)

Azeotropes

Azeotropes are liquid mixtures of two or more substances that form a mixture of a constant boiling point whose distillates have the same composition as the original mixture. (86-001)

INPO DEFINITIONS

B

Backup/backtrack function

1: The ability to reset the simulator to some prior time in its operation. (ACAD 90-022); 2: The ability to restart simulation at a previous time in the exercise. (86-026)

Behavior

The actions, physically or mentally, taken by a person to achieve a desired result. (90-005)

Benchmark

A demonstration of software performance when compared to a criterion with known results either manually derived or obtained independently from an established software system. (86-024)

Blank flange

A device installed in a mechanical system to stop flow. (85-016, Rev. 1)

Bleed rate

The rate at which fluid from the compressed side of the snubber piston bleeds back to the reservoir. This feature of hydraulic snubbers allows thermal growth while the snubber is in the activated (compressed) position and also allows the snubber to relax after activation during cyclic loading. Mechanical snubbers have an analogous feature caused by the inertial mass in the snubber. This definition corresponds to "release rate" as defined in ANSI/ASME OM4-1982, "Examination and Performance Testing of Nuclear Plant Dynamic Restraints"—Snubbers. (86-014)

Blind standard

A sample in which the concentration of a substance is precisely and accurately known to the program administrator, but not to the person performing the analysis. (83-016, Rev. 2)

Breakaway force

The minimum applied force required to initiate extension or retraction of the snubber. (86-014)

INPO DEFINITIONS

C

Calibration check

Uses a chemical standard or radioactive source that should produce a known response on the instrument being checked to verify the validity of the previous calibration. (83-016, Rev. 2)

Calibration or standardization

Process of using reference standards to establish a numerical relationship between an instrument output and the value of the parameter being measured. (83-016, Rev. 2)

Case study

1: An instructional strategy designed to promote better understanding of a specific (actual or hypothetical) event by presenting information germane to the event in a way that the trainee (audience) identifies closely with it. (90-003) (87-008) (87-010) (86-026) (86-025, Rev. 1); 2: An instructional strategy designed to promote better understanding of a specific—actual case studies should use actual events (i.e., operating experience) wherever possible or hypothetical— event by presenting information germane to the event in a way that the trainee identifies closely with it. (87-021)

Category I training

The level of radiological protection training required for personnel who have access to the protected area but do not enter areas controlled for radiological protection purposes unless continuously escorted by a Category II trained worker. (87-004)

Category II training

The level of radiological protection training required for personnel who have access to the protected area and work in areas controlled for radiological protection purposes. (87-004)

Causal factor

Causal factor

1: A condition that either causes a human performance situation or increases the chance for occurrence. Example: After being on shift for 14 hours, an operator was assigned the task of racking out the breaker for Feed Pump A. The breaker racked out, labeled Feed Pump A, was actually for Feed Pump B. This caused a loss of feed and reactor scram. The erroneous switch gear label caused the performance error. (OE-904); 2: A condition that shapes the outcome of a situation. (90-005); 3: . . . There are 17 potential causal factors associated with root cause analysis. Event causal factors for human performance problems are as follows:

- (a) **Verbal communication** The spoken presentation or exchange of information—The effectiveness of the presentation is affected by the method used to present the information.
- (b) **Written procedure and documents** (previously written communications)—The written presentation or exchange of information; the effectiveness of written communication is affected by the content of the document and the method used to present the information within the document.
- (c) **Man-machine interface** (previously interface design or equipment condition)—The design and maintenance of equipment used to communicate information from the plant to a person (displays/labels) or from a person to the plant (controls): also, the design considerations for equipment reliability.
- (d) **Environmental conditions** The physical conditions encountered in the work area—the physical configuration of equipment affects the accessibility of the equipment, and the condition of the physical surroundings or environment can affect maintainability or aging of the component.
- (e) **Work schedule** Those time-related factors that contribute to the ability of the worker to perform his assigned tasks in an effective manner—Excessive overtime, rotating shift work, and working on the job for extended periods of time have an influence on how well an individual will be able to perform a task.

continued on next page

Causal factor (continued)

- (f) **Work practice** A method a worker routinely uses to ensure the safe and successful performance of a task—including are the worker's practices for error detection, document use, equipment/material use, and work preparation.
- (g) **Work organization/planning** The work-related task—including are the planning, scoping, and assignment of the task to be performed. How well a job is planned and organized plays an important role in getting the job completed on time and error-free.
- (h) **Supervisory method** A technique used to directly control work-related tasks; in particular, a method used to direct and monitor workers in the accomplishment of tasks.
- (i) **Training/qualifications** (previously training/qualification method and training/qualification content)—The process of presenting information on how a task is to be performed prior to the accomplishment of the task and how the training program was developed and the adequacy of program content—based on task frequency, this includes periodic refresher training to determine proficiency and actions taken to correct training deficiencies. Additionally, this includes the actual performance of on-the-job training, understanding component/system interfaces, and the relationship of the task to overall plant performance. The effectiveness of the training is affected by both the method and content of the training.
- (j) **Change management** The process whereby the hardware or software associated with a particular operation, technique, or system is modified.
- (k) **Resource management** The process whereby manpower and material are allocated for a particular task/objective.
- (l) **Managerial method** Techniques used to direct, monitor, assess, modify, or exercise accountability relative to the performance of plant activities.

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Causal factor

Causal factor (continued)

Event causal factors for equipment performance problems are as follows:

- (m) **Design configuration and analysis** (previously plant/system design and analysis)—The design and layout of systems or subsystems needed to support plant operations and maintenance. This includes initial design specification, design calculations and analyses, materials selection, and control of subsequent design changes.
- (n) **Equipment specification, manufacturer, construction** (previously equipment manufacture and installation)—The process that includes the manufacture and installation of equipment in the plant.
- (o) **Maintenance/testing** The process of ensuring that components/ systems are maintained in the optimum condition and tested for operability.
- (p) **Plant/system operation** Reflects the actual performance of the system or component when performing its intended function.
- (q) **External** Influence outside the usual control of the utility.

(90-004)

Cause

The root initiator of an event; usually an equipment malfunction, procedural error, or personnel error. (84-029)

Caution

A statement used to call attention to a step of a procedure which, if not strictly followed, could result in damage to equipment or adversely affect plant operations. (TS-403)

Change data base

Reference documentation used to justify simulator design changes. This reference documentation will be incorporated into the design data base after successful implementation of the simulator design change. (87-016)

Checklist

A standard form, developed for each shift position and used by operations personnel to aid the turnover process; provides a convenient method of denoting equipment in service, surveillances in progress, limiting conditions of operation (LCO) status, and other documents oncoming operators should review to ensure a complete transfer of plant status information. (84-006, Rev. 1)

Chemical

A chemical is defined here as any liquid, gas, or solid that could be a significant personnel or equipment hazard if improperly handled, stored, or disposed of, or that could cause significant corrosion of plant materials, if introduced into plant systems. (85-021)

Chemical agreement

Determination of the consistency between the value of a given parameter and the values of related parameters within the error of the measurements. (85-039)

Chemical permit

A permit to be used when purchasing chemicals intended for use at the plant site. The permit provides information on handling, use, storage, disposal, hazards, and labeling of chemicals. (85-021)

Chemistry manager

The individual to whom the overall responsibility for administration of the chemistry program has been assigned. (85-039)

Chemistry supervisor

The individual to whom the overall responsibility for supervising the activities within the chemistry program has been assigned. (85-039)

Chemistry technicians

Individuals to whom the responsibilities for performing the daily activities within the chemistry program have been assigned. (85-039)

Clearance

A method of ensuring the protection of personnel and equipment by use of danger tags. (87-002)

Clearance holder

A qualified individual that is authorized to work or to supervise work under a clearance. (87-002)

Clothing contamination limit

Clothing contamination limit

5000 dpm or greater per 100 square centimeters of surface area on any article of personal clothing. (88-004)

Communications

The process of sending and receiving information. (87-018, Rev. 1)

Component

1: The equipment for which unavailable hours are recorded. In some cases, this may be a subsystem (e.g., diesel generator air-start subsystem). (86-021); 2: A constituent part of a system; includes valves, instruments, pumps, motors, etc.; often used interchangeably with the term "equipment." (88-009)

Component test

Evaluates the performance of a specific component. (86-004)

Component unavailability

The fraction of time that a component is unable to perform its intended function when it is required to be available for service (i.e., the component unavailable time divided by the time required to be available). Component unavailable time includes all time in corrective maintenance, preventive maintenance, surveillance tests and modifications during which the component is made inoperable. It also includes the fault exposure time (defined below) associated with component malfunctions, support system failures and human errors, if (a) such a failure would prevent the component from achieving its safety function during a valid system actuation and (b) the component could not be restored to service within a few minutes (i.e., could not be restored without corrective maintenance or without dispatching operators from the control room). Component unavailable time and time required to be available should be expressed in the same time units (i.e., hours, days, etc.) so that the component unavailability can be expressed as a dimensionless quantity. (86-021)

Conceptual design package

A functional design package in response to an Engineering Evaluation and Assistance request for which a modification is determined to be the proposed solution—The preliminary conceptual design is performed by the system engineer and reflects the plant staff's initial input to project engineering. The completed plant staff's initial input to project engineering. The completed conceptual design is the responsibility of the project engineer and is based on the preliminary conceptual design. (85-013)

INPO

Definitions

Construction Work Request (CWR)

Conclusion

The resulting consequence of facts. (90-004)

Condenser pressure

The absolute pressure (static) of steam measured in the condenser.
(84-035, Rev. 1)

Condition

A related circumstances pertinent to the event. (90-004)

Configuration management

An integrated process that identifies existing plant design requirements and controls changes to ensure the following:

- Selected plant structures, systems, components, and computer software conform to the approved design requirements;
- The plant's physical and functional characteristics are accurately reflected in selected plant documents (e.g., design, procurement, operating, testing, maintenance, and training).

An effective configuration management program identifies documented design requirements, ensures the design is properly implemented, and controls plant changes throughout the life of the plant. (87-006)

Consequential event

An event involving inappropriate human performance that results in adverse consequences. (90-005)

Construction testing

Testing of components that includes flushing, circuit checks, and hydrostatic tests. (CP-201)

Construction Work Request (CWR)

An administrative document to control and document work performed by construction on equipment accepted for pre-operational testing or operation.
(CP-201)

Contact hour of instruction

Contact hour of instruction

A one-hour period of education in which the course instructor is present or readily (immediately) available for instructing or assisting trainees/students; lectures, (simulator sessions), seminars, discussions, supervised study, problem-solving sessions, quizzes, and examinations are included (considered contact periods) under this definition. (86-007) (86-025, Rev. 1) (GPG-04)

Contact simulator training

Training that is conducted while using a simulator, including pre-exercise briefings and post-exercise critiques. Classroom training that supports simulator training is not considered part of this definition. (ACAD 90-022)

Continuing training

A systematic program of instruction to provide assurance that nuclear utility personnel are knowledgeable of applicable equipment modifications, procedural changes, and lessons learned from industry and in-house operating experience. Also included are improvements in job proficiency and development of broader scope and depth of job-related knowledge and skills. (ACAD 90-025)

Contributing causes

Causes that, if corrected, would not by themselves have prevented the event, but are important enough to be recognized as needing corrective action to improve the quality of the process or product. (90-004)

Contributing factor

1: A condition that may have affected the human performance situation in some manner. Example: In the example provided for definition 4.7, Causal Factor, the event was caused by an erroneous label. A contributing factor may have been operator fatigue. (OE-904); 2: A condition that may have affected the event. (90-004)

Control room communicator

The individual assigned to receive and transmit information over the various communication links located in the control room during declared emergency events. This position is only manned during declared emergency events, by an individual with operational knowledge, to facilitate control room communications. (87-018, Rev. 1)

Control room information book

A binder containing operator aids such as curves, graphs, tables, and other information usually addressing areas that include the following:

- equipment characteristics (e.g. pump and tank volume curves)
- reactivity effects (e.g. ECP and boration curves)
- conversion tables (e.g. milliamps output to psi units)
- chemistry-related information (e.g. sodium pentaborate volume vs. ppm concentration data)

These operator aids are normally generated by the Reactor Engineering, Technical Support, or Chemistry Departments for use by control room operators in the operations of the plant. (84-005, Rev. 1)

Control room instrument

For the purpose of tracking control room instrument operability, each individual channel and/or readout displayed in the control room is a single instrument. (Annunciators and plant computer CRT and printout displays are not included.) If, for example, a five-channel recorder is totally out of service, five instruments are considered inoperable. (84-019)

Control room operator

The licensed individual responsible for control manipulations in the nuclear plant control room. (GPG-04) (85-025) (83-022)

Control room simulator

A device that dynamically models the plant functions as presented in the control room. (83-006)

Copy number

A unique number assigned to each copy of a vendor manual. (87-009)

Core damage

Core damage

Failure of the fuel clad integrity to the extent that any of the following conditions exist:

- Fission product activity in the coolant exceeds the limits in technical specifications;
- Fuel is no longer in its original geometry;
- A major portion of the core cannot be operated for its design cycle length.

(87-021)

Corrective action

Action taken to prevent recurrence of an identified adverse condition or trend. (90-004)

Corrective actions

Action required to bring a deficient item into conformity with a standard. For material deficiencies requiring maintenance action, the corrective action may consist of identifying the deficiencies as described in reference 3.1, submitting a work order for corrective activities, and tracking the deficiency. (87-023)

Corrective maintenance

Repair and restoration of equipment that has failed or is malfunctioning, without changing factors that affect design criteria. (90-023) (86-021) (85-032) (85-037) (87-028)

Critical safety functions

Functions needed to control reactivity, remove core heat, provide an ultimate heat sink, and contain radioactivity. (86-026) (87-021) (86-025, Rev. 1) (85-025) (86-025) (90-003)

Critical task

Steps to be taken that could challenge the safety status of the facility if not performed properly. (86-025, Rev. 1)

Critique

The informal review of a student's or team's performance during an individual training exercise. (86-026)

INPO DEFINITIONS

D

Danger tags

1: Tags installed for the protection of personnel and equipment on the main control point and all boundary points to isolate equipment from all possible sources of energy. (CP-201); 2: (Attachment E) are installed on all boundary points that isolate equipment from sources of energy in order to permit work to be performed safely. Danger tags are used on clearance boundaries such as closed valves, opened vent and drain valves, opened electrical breakers, fuse holders, installed grounds, or specified positions for switches and dampers. (87-002)

Data base

The data stored in the computer system that is used by the Surveillance and Periodic Task Scheduling Program. (85-010)

Data evaluation

Data evaluation is the deliberate examination of analytical data in a retrospective sense to determine if it agrees with other related data and if good or bad trends are developing. (85-039)

Data package

A collection of information used to conduct an investigation and review of an unscheduled reactor trip. The data package includes a completed Post-Trip Review Report, hard-copy recorded data, and statements from personnel involved in the event. (84-029)

Dead band

The maximum lost motion measured pin to pin. "Dead band" includes mechanical clearances due to fit-up and lost motion due to the time necessary for valves on hydraulic snubbers to close. (86-014)

Deficiency

1: Any condition that deviates from the design of a system or component of equipment and results in a degraded ability to accomplish its intended function. (87-028); 2: An item that does not meet specified standards and requires corrective action. (87-023)

Deficiency identification sticker

Deficiency identification sticker

A small, adhesive backed form that is used primarily to identify deficiencies to those situations that preclude the use of a Deficiency Identification Tag. The sticker is also marked with a serialized number. A duplicate is not required since most stickers are used in the control room where the deficiency information can easily be directly placed on a work request. (83-045)

Deficiency identification tag

A two-part form that includes a string for ease of attachment and is used to identify a plant material deficiency. The tag is marked with a serialized number that is used for administrative control and for deficiency location by maintenance personnel. The hard copy of the tag is placed on or near the deficiency in the plant. The duplicate (NCR or carbon) of the tag serves as a temporary record of the deficiency until the data can be transferred to a work request. (83-045)

Deficiency tag/sticker

A small tag or adhesive-backed sticker that is used to identify a plant material deficiency—The form is marked with a serialized number for administrative control, work order identification, and deficiency location by maintenance personnel. (90-023)

Demonstration

A training method in which a procedure is shown in a step-by-step sequence. (86-018)

Demonstration training

1: Showing trainees by example how operations are to be conducted in accordance with good operating practices that include areas such as the application of science and engineering fundamentals, procedure usage, proper communications, and diagnostic techniques for the given tasks being demonstrated. (ACAD 90-022); 2: The display of proper operator actions by the simulator instructor for observing students. (86-026)

Department ALARA coordinator

A supervisor, planner, or engineer within a functional department (Operations, maintenance, etc.) assigned responsibility for conducting ALARA activities within his own department and for coordination with other departments. ALARA coordinators should also be established for utility and contractor construction groups. (82-001-OEN-08A)

Design authority

The utility design engineering organization ultimately responsible for ensuring technical excellence in the design process. (87-006)

Design data base

A collection of documents that describe the current performance and appearance standards chosen as the simulator design boundaries. (87-016)

Design process

Consists of the technical and management processes that commence with the identification of design input and that lead to and include the issuance of design output documents. Reference 3.1 provides additional information on the design process. (87-006)

Design requirements

The current functional and operational requirements for the plant as determined by the design authority. (87-006)

Design review

A critical and independent review to verify that the final design and the functional test meet their objectives—The extent of this review is a function of the importance to safety and reliability of the item under consideration, the complexity of the design change, the degree of standardization, and the similarity with previous proven designs. (TS-415)

Design verification

1: The process of independently reviewing, confirming, or substantiating the assumptions, inputs, methodology, and outputs used in the temporary modification package—this verification ensures the design is correct and will solve the initial problem without creating new problems. (85-016); 2: The process of ensuring that all simulator design change aspects that may affect simulator performance and appearance have been properly considered and documented. (87-016)

Designer

The utility organization ultimately responsible for providing initial designs and design reviews. Depending upon the complexity and nature of the design change, initial designs and design reviews may be performed by the plant technical support department, a corporate engineering or design department, or a vendor contracted to provide design activities. (TS-415)

Detailed design package

Detailed design package

A package that is the output of the design process that is based on the conceptual design package, and is used to develop detailed installation and testing instructions. (85-013)

Detailed lesson

A lesson that provides in-depth coverage of all aspects of the subject relative to the trainee's actual job description. A detailed lesson will last one to three hours. (EP-804)

Detection limit

The lowest concentration at which there is a five percent chance of a Type I error (a statement that a substance is present when it is not). See Reference 3.7 for further details. (83-016, Rev. 2)

Diagnosis

A systematic, logical analysis of plant conditions to identify plant problems and potential causes of these problems, assign probabilities to each potential cause, and develop a logical and prioritized sequence for actions to correct problems or eliminate each potential cause. (90-003)

Diagnostics

A systematic, logical analysis of plant conditions to identify problems and potential causes of these problems, assign probabilities to each potential cause, and develop a logical and prioritized sequence for corrective actions to correct problems or eliminate each potential cause. (86-025, Rev. 1) (86-026)

Direct supervision

The observation of unqualified worker task performance by a qualified individual. This does not mean continuous observation, but should include appropriate supervisory methods to determine proper job performance. These methods should be specifically designed to allow intervention by the qualified individual to ensure personnel safety and equipment reliability should errors in the task performance occur. (ACAD 90-025)

Direct-Reading Dosimeter (DRD)

1: A quartz fiber type pocket ionization chamber dosimeter that can be read directly by the user without the use of a separate readout device. Throughout this procedure the terms DRD, pocket dosimeter, and dosimeter are used interchangeably to refer to quartz fiber DRDs. Other terms used in the industry for the same devices include pocket ion chambers (PICs) and self-reading dosimeters (SRDs). (82-001-EPN-02); 2: A quartz fiber type pocket ionization chamber dosimeter or digital read-out (GM tube or solid state detector) dosimeter issued to personnel to assist them in tracking and controlling their radiation exposure. For the purposes of this procedure, indirect-reading dosimeters may also be included in this category when used for the same purpose; that is, to estimate and control personnel radiation exposure on a day-to-day basis. Other terms used in the industry for DRDs include pocket ion chambers (PICs) and self-reading dosimeters (SRDs). (82-001-EPN-02) (82-001-EPN-03)

Disabled annunciator alarm

A modification that disables the visual and/or audible alarm function of an annunciator. (85-016, Rev. 1)

Discrepancy

Failure to develop, document, or effectively implement any applicable element of the program identified in the review. (85-014)

Discrepancy report

A report that identifies and tracks deviations in simulator performance or appearance from the current design specification. (87-016)

Discussion

A training method involving guided conversation among trainees that encourages constructive thinking and interaction within the group. (86-018)

Distributed contamination

Contamination that covers an area larger than 1 cm². (88-004)

Drag force

The force required to maintain snubber rod movement at a constant velocity. The constant velocity. The constant velocity must be below the activation level. (86-014)

Drill

Drill

1: A supervised training exercise conducted in a work environment for the purpose of developing and maintaining skills required to cope with plant abnormal/emergency conditions, which includes an evaluation of performance. (86-025, Rev. 1); 2: A supervised training exercise conducted in a work environment for the purpose of developing and maintaining skills required to cope with plant normal, abnormal, and emergency conditions. The drill may include an evaluation of performance, be purely a training experience, or be a combination of both. (90-003); 3: A supervised training exercise or walk-through conducted or simulated in a work environment for the purpose of developing and maintaining skills required to cope with plant abnormal/emergency conditions and including an evaluation of performance. (83-022) (85-025)

Duty engineer

An on-call individual possessing a bachelor of science degree in engineering or related science or equivalent plus training in power plant systems, integrated plant operation, and transient analysis. He may be the Shift Technical Advisor (STA) or equivalent. (84-029)

INPO DEFINITIONS

E

Efficiency

Efficiency is a measure of the power steam cycle thermal performance. (86-004)

Electrical jumper

A temporary electrical connection that bypasses components within an electrical circuit, modifying the circuit design or configuration. (85-016, Rev. 1)

Emergency communications

Urgent messages transmitted during an emergency situation concerning the operation of the plant. (87-018, Rev. 1)

Emergency Operating Procedures (EOPs)

Plant procedures directing operator actions necessary to mitigate the consequences of transients and accidents that cause plant parameters to exceed reactor protection system setpoints, engineered safety features setpoints, or other appropriate technical limits. (83-004) (82-016) (82-013) (83-006)

Emergency "Operating" Procedure Guidelines (EPGs)

1: Technical guidelines that provide sound engineering bases for the development of EOPs. (82-013); 2: Guidelines that provide technical bases for the development of EOPs. (83-006) (83-004) (82-016, Rev. 1)

Emergency operational correctness

Plant procedures directing operator actions necessary to mitigate the consequences of transients and accidents that cause plant parameters to exceed reactor protection system setpoints, engineered safety features setpoints, or other appropriate technical limits. (83-004)

Enabling Learning Objectives (ELO)

An objective in a set of sequenced objectives that supports the attainment of a terminal learning objective. Each ELO represents a significant learning step in the performance of the task. (82-026)

Enclosed volume**Enclosed volume**

Any space large enough for personnel entry with the potential for containing atmospheres hazardous to life. (83-032)

Engineering evaluation and assistance request

A document used to request technical support to review and recommend corrective action on a particular station problem. (85-013)

Engineering support personnel

Engineering support personnel are technically qualified personnel assigned to assess equipment and system performance and to recommend corrective action when necessary. (86-002)

EOP network

The set of EOPs and all procedures that are called out in the EOPs or that support the use of the EOPs during emergency conditions. (83-006)

EOP operational correctness

A characteristic of EOPs that indicates the degree to which the EOPs are compatible with plant responses, plant hardware, and the shift manpower to manage emergency conditions in the plant. (83-004) (83-006)

EOP source documents

Documents or records upon which EOPs are based. (82-016, Rev. 1) (83-004) (83-006)

EOP technical accuracy

A characteristic of EOPs that indicates the degree to which proper incorporation of generic and/or plant-specific technical information from EOP source documents and plant hardware has been made. (83-004) (83-006)

EOP usability

A characteristic of EOPs that indicates the degree to which the EOPs provide sufficient and understandable operator information to manage emergency conditions in the plant. (83-004) (83-006)

EOP validation

The evaluation performed to determine that the actions specified in the EOPs can be followed by control room operators to manage emergency conditions in the plant. (83-004) (83-006) (82-016, Rev. 1)

EOP verification

The evaluation performed to confirm the written correctness of the EOPs and to ensure that the generic and/or plant-specific technical aspects have been properly incorporated. (83-004) (83-006) (82-016, Rev. 1)

EOP written correctness

A characteristic of EOPs that indicates the degree to which proper incorporation of information from the plant-specific writers guide for EOPs and other appropriate administrative policies has been made. (83-004) (83-006)

EOPIA review group

1: Representatives from four owners group sub-committees chartered with the development of EPGs, as well as NSSS vendors and INPO. (82-013) (83-004) (83-006); 2: . . . See EOPIA Program (82-013) for further information. (82-016, Rev. 1)

Equipment

Encompasses structures, systems, and components. (85-016, Rev. 1)

Equipment Qualification (EQ) program

A program that demonstrates that Class 1E equipment, with its interfaces, meets or exceeds design specification requirements throughout its installed life as described in IEEE Std. 323-1983. (TS-403)

Equipment specification

The portion of the procurement contract that identifies the technical requirements for the equipment to be purchased, e.g., design pressure, temperature, flow, environmental conditions, drift characteristics, operating speed, seismic requirements, etc. (TS-403)

Ethylene glycol

Ethylene Glycol, or $\text{CH}_2\text{OH}\cdot\text{CH}_2\text{OH}$, is a colorless liquid that is miscible with water. It often serves as an anti-freeze—60 percent in water freezes at -49°C . (86-001)

Evaluation

The formal determination of a student's or team's performance during simulator training. (86-026)

Event

1: A sequence of actions that results in a deviation from the expected. (OE-904) 2: An undesirable occurrence. (90-004) (90-005)

INPO

Definitions

Examination

Examination

A test used to measure knowledge, skill, or performance on/in one or more objectives/subjects. (85-025) (83-022) (GPG-04)

Examination validity

Information provided in the test questions closely parallels the information available on the job, while the responses elicited are similar or identical to the decisions, solutions, and actions (in terms of sequence and timeliness) required for effective job performance. (86-025, Rev. 1)

Examinations

A test designed to measure knowledge, skill, or achievement in one or more subjects. (GPG-04)

Exercise guide

1: A lesson plan designed for use in the simulator training setting. (86-025 Rev. 1) (86-026); 2: It contains more detailed instructions than—and is developed from—scenarios. These exercise guides are to be used for the conduct of an exercise and include detailed anticipated operator response as well as position-specific objectives. They are essentially the documents that govern the implementation of scenarios. (86-025, Rev. 1); 3: A lesson plan used in the conduct of simulator training and drills. It contains more detailed information than—and is developed from—scenarios. These exercise guides are to be used for the conduct of an exercise and include detailed anticipated responses as well as position-specific objectives. They are essentially the documents that govern the implementation of scenarios. (90-003)

Experience

1: The knowledge and skills derived from direct participation in specific subject-related activities. (ACAD 90-010); 2: The knowledge and skill derived from direct participation in specific subject-related activities. Knowledge derived from observation of others is not experience. (84-003) (86-018) (87-008) (87-010); 3: Applicable work in design, construction pre-operational and start-up testing activities, operation, maintenance, or technical services. Observation of others performing work in the above areas is not experience. (82-022)

Experience (instructional)

Full-time employment in a training/instructional position with responsibility for designing, developing, presenting, and/or evaluating training activities. (82-026)

Experience (Nuclear power plant)

Applicable work in design, construction, preoperational and start-up testing activities, operation, maintenance, or technical services. Observation of others performing work in the above areas is not experience. (82-026)

Extraneous act

Unnecessary action not required by procedure or training. (OE-904)

INPO DEFINITIONS

F

Face-to-face communications

The act of directly communicating verbally without the aid of mechanical or electrical communications equipment. (87-018, Rev. 1)

Failure modes and effects analysis

A systematic procedure for identifying the modes of failure and for evaluating their consequences. (TS-415)

Fast/slow time function

The ability to vary the speed of simulation with respect to real time in the plant. (ACAD 90-022) (86-026)

Fault exposure time

The period of time during which a component failure existed without detection. This time is equal to the time between the component failure and the time the failure is detected. Since the time of component failure usually is not known, an average fault exposure time is used for the method described in this report. For most cases, the average fault exposure time is one-half the time interval between the last successful component test or demand and the time the failure is detected. See additional discussion of average fault exposure times in Attachment B. (86-021)

Fault tree analysis

An analytical technique that identifies possible ways system unavailability can occur. The fault tree is a logic model of the various parallel and/or sequential combinations of faults that will result in system unavailability. The fault can be any event or set of events that leads to system unavailability (e.g., component failures, maintenance and testing, etc.). Numerous computer codes are developed to perform the Boolean algebra manipulation required to solve the fault tree logic for the system unavailability. (86-021)

Fidelity

1: The degree of both physical and functional accuracy of the simulator as compared to the plant. (ACAD 90-022); 2: The degree of both physical and functional fidelity. (86-026)

Field change request**Field change request**

A request to make a change to a design document, for the purpose of correcting an error or facilitating the installation or operation of a plant modification. (85-013)

Final turnover

The turnover of systems from the testing organization to the operations organization after completion of pre-operational testing. (CP-201)

Fixed contamination

Contamination that adheres tightly to a surface or becomes embedded in the material by methods such as abrasion or neutron activation. (89-008)

Formal on-the-job training

On-the-job training is a training setting in which plant employees achieve learning objectives through training conducted in the job environment. (86-018) (87-008) (87-010)

Freeze function

The stopping of simulation during an exercise. (ACAD 90-022) (86-026)

Frisker

A pancake probe containing a Geiger-Mueller detector attached to a rate meter HP-210 type. (88-004)

Fuel failure

A condition in which a breach of fuel cladding exists that permits fission products or fuel to migrate into the reactor coolant. (87-001)

Functional fidelity

The degree of similarity between the simulator and the reference plant in the static and dynamic response of equipment and controls. (86-026) (87-016)

Functional supervisor

That individual with overall responsibility for a given plant function, such as operations, maintenance, technical support, and training. (86-025)

Functional test

Functional test

1: A test of the installed modification to verify its proper operation—this may be a surveillance test or an observation of the correct operation of the modification over the expected range of conditions. (85-016, Rev. 1); 2: A test to verify the functional design of a modification—It should ensure the modification will function as intended under design basis conditions and is properly integrated into the plant systems for normal and transient conditions. (85-013)

INPO DEFINITIONS

G

GO analysis

An analytical technique developed by EPRI (Reference 3.1), for assessing the availability/reliability of power plant systems. GO analysis models the logic, operation, and interaction of physical components in a system. (86-021)

INPO DEFINITIONS

H

Halogen

Halogen, or Halogenide in international usage, is the group of nonmetallic elements of the seventh group of the periodic system: Fluorine, Chlorine, Bromine, and Iodine. (86-001)

Halogenated hydrocarbon

A halogenated hydrocarbon is a compound containing halogens, hydrogen, and carbon. Examples include trichloroethane $C_2H_3Cl_3$ and Freon (F-12) CCl_2F_2 . (86-001)

Home plant

The nuclear power plant for which a student is being trained and at which it is expected that he will work when training has been completed. (86-026)

Hot particle

1: A small, loose, highly radioactive particle. Hot particles originating from irradiated fuel exhibit high beta exposure rates. Hot particles originating from activated corrosion products exhibit high gamma exposure rates. These particles are highly transportable due to their small size and electrostatic charge. Hot particles are considered to be greater than 15,000 disintegrations per minute. (89-006); 2: Hot (discrete) particle. A small, loose, highly radioactive particle. Hot particles originating from irradiated fuel exhibit predominately high beta dose rates. Hot particles originating from activated corrosion products exhibit predominantly high gamma dose rates. These particles are highly transportable due to their small size and electrostatic charge. (89-008); 3: A small radioactive particle—Although most hot particles have a total activity of less than 2 micro-curies, activities in the milli-curie range have been observed. Hot particles typically are not visible (less than 100 microns), but even particles up to a few millimeters in size may be difficult to detect while exhibiting very high contact dose rates. (88-004)

Hot particle buffer zone

An area just outside the hot particle control zone where worker protective clothing is removed and close attention paid to all material leaving the hot particle control zone. (Yellow Zone) (89-006)

Hot particle clean zone

Hot particle clean zone

An area where hot particles are not present and surveys are performed on a routine basis to verify that no hot particles enter the area. (Green Zone) (89-006)

Hot particle control zone

An exclusive control area established to control hot particles in designated areas of the plant. The hot particle control zone should be surrounded by a buffer zone if physically possible. (Red Zone) (89-006)

Hot tool crib (tool storage areas)

Areas that are authorized and controlled for the issuance and storage of tools and equipment designated for use in the station's RCA. (89-008)

Housekeeping

The cleaning and preservation of the plant, its systems and components. Also used to refer to the condition of plant cleanliness, orderliness, and preservation. Examples of housekeeping deficiencies are listed in Attachment A. (87-023)

Human error

The unintentional act (or failure to act) of an individual or group of individuals that results in an unexpected and/or undesirable set of conditions. (87-003)

Human performance

Human performance involves the execution of actions by personnel in response to actual or perceived needs. (OE-904)

INPO DEFINITIONS

I

In-service

Any equipment system or component considered operating, operable, or in standby for the plant operating modes for which the temporary modification will be in place. (85-016, Rev. 1)

Inactive license

1: The license held by an individual who attends and successfully completes the requirements of the continuing training program but is not assigned responsibility to perform the functions of a licensed operator or a senior licensed operator on shift in an active status per 10CFR55. (86-025, Rev. 1);
2: The license held by an individual not assigned responsibility for the following:

- performing the functions of a licensed operator or a senior licensed operator on shift, with responsibility for a minimum of three shifts per calendar quarter
- attending and successfully completing the requirements of the continuing training program.

(86-025)

Inappropriate action

A human performance situation in which human behavior or action causes an undesirable event. Example: A plant was being ramped down in power due to a reactor coolant system leak. During the transfer from normal to reserve power, one of the reserve power feeder breakers would close but would not power the load. Upon investigation, it was discovered that the breaker was in the "test" position (not fully inserted into the bus). The breaker was reopened, inserted into the bus, and then successfully operated. The event evaluation determined that the breaker had been left in the test position after relay and breaker testing. During the flurry of activity at the time, the shift supervisor had inappropriately assumed that the breaker had been restored to the operate position after testing. (OE-904)

Incorrect calculation

Determined value is in error. (OE-904)

Independent verification

Independent verification

1: The act of checking a component position independently of activities related to establishing the component's position. (87-002); 2: Check by one or more knowledgeable individuals not involved in the actual installation of the temporary modification. (85-016); 3: The act of checking a condition, such as a component position, separately from activities related to establishing the condition or component's position. (87-003)

Independent work assignment/performance

Designation of a qualified individual to effectively and safely perform job tasks independently or be responsible for the effective and safe accomplishment of work by a work group (lead worker). (ACAD 90-025)

Individualized instruction

1: A method of instruction without a full-time instructor in which the sequence, pace, and condition of training are controlled by the program materials. (ACAD 90-025); 2: Training that takes place without a full-time instructor being present—The learning objectives are provided in the training materials or when needed by the trainee. (ACAD 90-010)

Industrial safety program

The overall program designed to minimize work-related injuries and illnesses through the identification, assessment, and correction of unsafe work practices and conditions. Examples of industrial safety deficiencies are listed in Attachment B. (87-023)

Industry operating experience reports

Industry operating experience reports are generated from sources outside the utility's organization and normally deal with the more important or significant plant events. These reports are typically generated by INPO, the Nuclear Regulatory Commission (NRC), other utilities, or nuclear steam supply system (NSSS) suppliers and include the following:

- (a) **INPO Significant Event Reports (SERs)** SERs are generated by the SEE-IN Program from the screening of licensee event reports (LERs) and other operating experience reports. Each SER provides a brief description of the significant event or problem and comments on why it was considered significant. SERs are disseminated via NUCLEAR NETWORK as they are identified.

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Industry operating experience reports

Industry operating experience reports (continued)

- (b) **INPO significant event notification** Certain significant events are of special interest to the industry. In such cases, a Significant Event Notification is disseminated via NUCLEAR NETWORK in advance of the SER. The purpose of a Significant Event Notification is to alert plants as promptly as possible that a significant event has occurred. Because the Significant Event Notification is issued within a few days after an event, many of the details of the event may not be available. Further information is provided in a follow-up SER.
- (c) **INPO Significant Operating Experience Reports (SOERs)** Each significant event identified in the SEE-IN Program undergoes analysis within INPO. When INPO recommendations result from these analyses, the recommendations are incorporated into an SOER. The SOER with its recommendations is disseminated by mail from INPO. Each SOER is color-coded to indicate priority for utility attention: red (immediate attention) or yellow (prompt attention).
- (d) **INPO Significant by Others (SO) notifications** Used to identify significant events that have already been adequately reported to the industry by equipment suppliers. The purpose is to prevent duplication of reporting. The SO notifications are disseminated on NUCLEAR NETWORK.
- (e) **INPO Operations and Maintenance Reminders (O&MRs)** In the process of screening plant event reports, INPO frequently identifies information that is not considered significant but may be of special interest to the power plants. This information is reported in an O&MR and transmitted via NUCLEAR NETWORK.
- (f) **Nuclear network** A computerized communications network used to disseminate operating experience and other information to the industry. The operating experience information may be input by utilities, INPO, nuclear steam supply system (NSSS) suppliers, architect/engineers, or others.

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Industry operating experience reports

Industry operating experience reports (continued)

- (g) **NRC notices, bulletins, and generic letters** The NRC uses information notices, bulletins and generic letters to inform licensees of problems of potential generic significance, to solicit supplemental information from licensees, or to require specific licensee actions in response to identified concerns.
- (h) **Supplier and architect/engineer correspondence** NSSS suppliers and architect/engineers provide letters, reports, and technical bulletins to utilities to identify problems and recommend corrective actions for plant equipment and procedures.

(85-019, Rev. 1)

Initial condition

A set of data that represents the status of the reference unit from which real-time simulation can begin. (ACAD 90-022)

Initial conditions

The set of simulated plant parameters at the start of an exercise. (86-026)

Initial training

A systematic program of instruction designed to ensure that nuclear utility personnel possess the knowledge and skills necessary to perform job functions in a competent manner prior to being assigned independent job responsibilities. (ACAD 90-025)

Inlet steam temperature

The saturated steam temperature corresponding to the condenser pressure. (84-035, Rev. 1)

INPO Standardized GET-RP Program

The INPO standardized GET-RP program is an industry-wide program designed to ensure that employees at each plant receive similar training in generic radiological protection information. (87-004)

Inspection coordinator

A designated member of plant staff who is responsible for the overall coordination of inspection activities. (87-023)

Inspection zone

A physical area of the plant that is identified for inspection purposes. (87-023)

Installation package

A package of information, instructions, and documentation developed for and from the installation and testing of a plant modification. (85-013)

Installation procedure

A procedure that provides overall guidance for the installation of a specific modification—it should establish the overall sequence of staging and installation, prerequisites, and the required plant, system, and equipment status and configuration at various stages of implementation. For example, it should address whether or not system isolation and containment integrity are to be maintained, and how they will be maintained. It should also describe the acceptance criteria for operability. (85-013)

Installation test

A test that verifies proper installation of equipment—examples include component cleanliness checks (flushing), hydrostatic tests, continuity checks, and electrical tests as applicable. (85-013)

Instructional hour

1: A one-hour period of training in which the course instructor is present or readily available for instructing or assisting the trainee. Under this definition, one hour devoted to any of the following activities is considered an instructional hour: programmed learning materials, interactive media such as computer controlled/assisted instruction, lectures, seminars, discussions, problem-solving sessions, quizzes, examinations, on-the-job training, laboratory exercises, or simulation exercises. (82-026); 2: A one-hour period of training in which the course instructor (the appropriate supervisor in on-the-job training phases) is present or readily available for instructing or assisting the trainee. One hour devoted to any of the following activities is considered an instructional hour under this definition: lectures, seminars, discussions, problem-solving sessions, quizzes, examinations, on-the-job training, laboratory exercises, and simulator exercises. (GPG-04) (82-022)

Instructional hour or contact hour

Instructional hour or contact hour

A one-hour period of training in which the course instructor (the appropriate supervisor in on-the-job training phases) is present or readily available for instruction or assisting the trainee. One hour devoted to any of the following activities is considered an instructional hour under this definition: programmed learning, supervised study, lectures, seminars, discussions, problem-solving sessions, quizzes, examinations, on-the-job training, laboratory exercises, and simulation exercises. (83-022) (85-025)

Instructor

An individual who presents classroom, laboratory, or simulator instruction or one who develops training programs and materials, monitors or directs on-the-job training, and/or evaluates trainees. (82-026)

Instructor certification

The process of determining, verifying, and attesting formally that individuals meet the instructional capability and the technical competence qualification criteria established for specific instructor positions. (82-026)

Instrument laboratory

The central on-site facility under the responsibility of the instrument and controls group that maintains, calibrates, and issues most of the plant portable instrumentation and test equipment. (84-006, Rev. 1)

Intervention

The act of bringing conditions of significance to the attention of the operating crew, normally by notifying the shift supervisor. Intervention on the part of STAs is never intended to include manipulation of controls in violation of license requirements or interrupting the chain of command by providing direction to the operating crew. (90-003)

Item

Any spare part, consumable, equipment, or material. May include entire component, valve, motor, instrument, gasket, adhesive, seal, etc. (85-023)

INPO DEFINITIONS

J

Jet mixing

Jet mixing is mixing a liquid using a specially designed nozzle that combines two streams of liquid. (86-001)

Job analysis

1: A method used in obtaining a detailed listing of the duties and tasks of a specific job. (ACAD 90-025); 2: A method used to obtain a detailed listing of the duties and tasks of a specific job—Job analysis is the first step in obtaining data required for task analysis. (ACAD 90-010) (87-010) (84-003) (86-018) (87-008); 3: The basic method used to obtain a detailed listing of engineering systems and tasks necessary to perform a clearly defined, specific job. Job analysis is the first step to obtain data required for task analysis. (82-026) (83-022)

Job Performance Measure (JPM)

1: A performance test used to evaluate the proficiency of a trainee on a specific task or set of tasks. (ACAD 90-025); 2: Job Performance Measures (JPM) are tests used to evaluate a worker's proficiency on a specific job task. (87-010) (84-003) (86-018); 3: Written, oral, or performance tests used to evaluate the proficiency of a job holder or candidate on a specific job task (he/she) performs(ed). (83-022); 4: . . . A test is any device or technique used to measure the performance of a trainee on a specific task or subject matter. (82-026) (84-003); 5: Test used to evaluate an operator's knowledge of, and proficiency on, a specific task. (86-025, Rev. 1)

Job planner

The individual who plans and coordinates a maintenance, construction, or testing activity. This may or may not be the Work Supervisor for the activity. (82-001-OEN-08A)

Jurisdiction

Having authority and control of components, equipment, or area. (CP-201)

Jurisdictional tags

Distinctive colored tags, including stickers and labels, that identify which site group has jurisdiction of components and equipment, including construction, and pre-operational, and final turnover testing tags. (CP-201)

INPO DEFINITIONS

K

Kip

The force unit frequently used in describing snubber sizes.

1 kip = 1000 pounds force. (86-014)

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INPO DEFINITIONS

L

Lead reviewer

An individual whose experience and training qualifies him to organize and direct a review, report review findings, and evaluate corrective action. (EP-801)

Learning objective

A statement that specifies measurable behavior that a trainee should exhibit after instruction, including the conditions and standards for performance. (ACAD 90-025) (87-010) (86-018) (87-008)

LEL

Lower explosive limit of a gas in air. (83-032)

Lesson plan

1: An instructor's primary training document that outlines instructor and trainee activities, the learning objectives, and the resources necessary for the conduct of training. (ACAD 90-025); 2: The instructor's primary training document that outlines instructor and student activities and the resources necessary for the conduct of training in the classroom. (86-026)

Licensed Operator (RO)

Any individual who possesses an operator's license pursuant to Title 10, Code of Federal Regulations, Part 55, "Operators' Licenses." (GPG-04) (85-025) (83-022)

Licensed personnel

1: Any person who possesses a Nuclear Regulatory Commission (NRC) operator license or senior operator license. (86-025, Rev. 1); 2: Those individuals who possess an active or inactive Nuclear Regulatory Commission (NRC) operator license or senior reactor operator license pursuant to Title 10, Code of Federal Regulations, Part 55, "Operators' Licenses." (86-025, Rev. 1)

Licensed Senior Operator (SRO)

Any individual who possesses a senior operator license pursuant to Title 10, Code of Federal Regulations, Part 55, "Operators' Licenses." (GPG-04) (85-025) (83-022)

Licensee Event Reports (LER)

Licensee Event Reports (LER)

Licensee event reports are notifications of significant events outlined in 10 CFR 50.72 and 10 CFR 50.73. (86-002)

Lifted lead

A conductor which is disconnected from its normal circuit. (85-016, Rev. 1)

Load rating

The design load of the snubber for normal, emergency, and faulted service in accordance with the service limits of the "ASME Boiler and Pressure Vessel Code", Section III. (86-014)

Local IV exempt

A designation for valves in high radiation fields that exempts them from Independent Verification (IV) requirements at their physical location. (87-003)

Local Operator Action function (LOAs)

The simulation of activities normally performed outside the control room by other plant personnel. (86-026) (ACAD 90-022)

Lockup (or activation) level

The shaft velocity or acceleration at which the snubber no longer allows controlled thermal growth of the system but becomes an essentially rigid pipe support. (86-014)

Logs (roundsheets)

Records used by operations personnel to describe or record operating information and events necessary for evaluating and trending plant conditions or for analysis of previous plant conditions. (84-006, Rev. 1)

INPO DEFINITIONS

M

Maintenance manager

The individual with overall responsibility for supervision of all personnel in the station maintenance organization. (ACAD 90-010)

Maintenance procedure

A written document that provides step-by-step methods to ensure consistent performance of a specific activity. (90-023)

Maintenance Request (MR)

1: A maintenance document used to control and record work in the plant from the time of identification until satisfactory completion of the corrective and/or preventive maintenance action and return to service—In addition, the maintenance request should document or easily cross-reference to the results of the post-maintenance test. (87-028); 2: Initial documentation of a deficient equipment condition; used in screening deficiencies—The MR also will serve as documentation for completion of minor maintenance activities such as lubrication, light bulb replacement, etc. (90-023)

Maintenance work instructions

Written instructions provided to the craftsman to assist him in performance of a task—The level of detail of these instructions is based on the complexity of the task, special engineering considerations/specifications, and skill levels of the workers performing the task (skill-of-the-craft). (90-023)

Maintenance Work Order (MWO)

Documentation to perform maintenance of a broader scope that requires detailed documentation of work performed, spare parts, procedures, or testing to verify maintenance was performed correctly—Maintenance work orders are initiated from a maintenance request. (90-023)

Maintenance work package

A consolidated document that identifies to the craftsman all the necessary requirements to safely and accurately perform a maintenance task with minimum delays. (90-023)

Maintenance Work Request (MWR)

Maintenance Work Request (MWR)

A work control document that is used to control and document the correction of plant material deficiencies from the time of identification until the satisfactory completion of the corrective actions. (CP-201) (85-033)

Major or significant software change

A change that does cause the simulator functional fidelity to deviate from the current design data base. (87-016)

Malfunction

1: Any simulator feature that allows controlled degradation of performance or failure of simulated plant systems or equipment. (ACAD 90-022); 2: The ability to fail or degrade the simulated performance of plant components. (86-026)

Malfunction variables

Variable parameters that alter the time rate of insertion or magnitude of a malfunction. (ACAD 90-022) (86-026)

Manager of nuclear power

The individual in the utility organization directly responsible for the operation of that utility's nuclear power plants (usually the person to whom the plant manager reports). (86-025) (GPG-04) (85-025) (83-022)

Material deficiency

An installed system or component with a physical defect that does not conform to specified standards. Examples of material condition deficiencies are provided in Attachment C. (87-023)

Maximum and minimum values

The highest and lowest acceptable parameter values that are either provided by the equipment supplier or determined by actual testing or experience. (84-030, Rev. 1)

Measuring & Test Equipment (M&TE)

M&TE includes all devices or systems used to calibrate, measure, gauge, troubleshoot, test, or inspect in order to control data or to acquire data to verify conformance to specified requirements. M&TE does not include permanently installed plant instrumentation, nor does it include test equipment used for preliminary checks where data obtained will not be used to determine acceptability or verify conformance to established criteria. (84-006, Rev. 1)

Mechanical jumper

Temporary connection such as a spool piece, hose, tygon-type level indicator tubing, ductings, or piping that joins two systems together or bypasses a component within a system, thus altering the system's design or configuration—This does not include hoses connected from system drains to floor drains or providing air to pneumatic tools or breathing apparatus through normal service connections. (85-016, Rev. 1)

Miniature danger tags

(Attachment E) are small sized tags that serve the same purpose as the full-size danger tags. These miniature danger tags are to be used on control panels that have closely spaced control switches and indicators and/or push-button type control switches where attachment of a full-size tag may obscure switches, indicators, controls, or identification labels. Because the miniature tags are not as visible as the full-size danger tags, the miniature tags should only be used where necessary. (87-002)

Minor changes

Changes made to an approved procedure solely for correction of punctuation, insignificant word or title changes, or typographical errors. Minor changes shall not change the intents of the procedure or alter the sequence of steps in the procedure. (84-020)

Minor maintenance

Maintenance actions for deficiencies on station electrical, mechanical, or instrument components or parts where all the following conditions are met:

- (a) The component is nonsafety-related or, if the component is safety-related, the portion or part worked does not perform or affect a safety-related function.
- (b) The component or part does not perform an environmental qualification (EQ) function.
- (c) Integrity of the component will not be violated.
- (d) Material substitution will not be involved.
- (e) Disassembly of the component or part will not be required.

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Minor maintenance

Minor maintenance (continued)

- (f) Welding will not be performed on a component or part that is safety-related, treated as safety-related, or seismically mounted.
- (g) Welding will not be performed on a pressure vessel.
- (h) Welding will not be performed on system piping.
- (i) A tagout will not be required.
- (j) The work performed is of such a minor nature that a written procedure is not required. However, if a procedure exists, it may be used.
- (k) Post-maintenance testing will not be required.
- (l) The work is of such a simple nature that detailed planning is not required.

(90-023)

Minor software change

A change that does not cause the simulator functional fidelity to deviate from the current design data base. (87-016)

Miscible

Miscible is defined as the ability of certain liquids to mix in all proportions. (86-001)

Miscommunication

Failure to transmit or receive information correctly; miscommunication may be verbal or written. (OE-904)

Mock-up

Static device (e.g., models, photos, drawings) that portrays control room hardware and configuration. (83-006)

Monitored parameter function

Mode change surveillance report

This report lists those technical specification surveillances that are condition-dependent or are required for plant mode changes. The information provided in this report is to be used in conjunction with appropriate operating procedures. This report is generated weekly. (85-010)

Model accuracy

The degree of exactness and measure of correctness by which a math-based software program replicates the steady-state and transient response of a dynamic system or process. (86-026) (ACAD 90-022)

Modification

A planned change in a plant structure, system, or component as described in design documents that is accomplished in accordance with the requirements and limitations of applicable procedures, codes, standards, specifications, licenses, and pre-determined safety restrictions. (85-013)

Modification follow group

An ad hoc group of representatives assigned from selected departments to provide design, procurement, installation, testing, and software development support to a modification—Members of the modification follow group may be standing members or selected for selected modifications. Each member is responsible for the tasks assigned to his respective department. (85-013)

Module

A composite education/training program designed to provide each position candidate with the essential skills and knowledge needed to effectively and safely assume the job accountabilities for the position being sought. (GPG-04)

Monitored parameter function

1: The ability to interrupt as well as modify the data transfer from the simulator mathematical models to the simulator panel instrumentation. (ACAD 90-022); 2: The ability to select specific system parameters for tracking to aid student evaluation and discussion (post-training critiques). (86-026) (90-022)

INPO DEFINITIONS

N

Natural organic acid

A natural organic acid is a naturally occurring compound containing one or more carbonyl radical; for example, acetic acid (CH_3COOH). (86-001)

Near miss

A human performance situation in which an inappropriate action almost occurs. Example: An I&C technician was troubleshooting a faulty main feedwater pump speed control system. Two suspect circuit boards had to be pulled from the control cabinet. When pulling the circuit boards, the technician almost pulled one board from the operating feedwater pump circuit because the circuit board labeling scheme was left to right but in descending order. (OE-904)

Needs analysis

1: A process of identifying potential or existing training needs by examining gaps between performance requirements and existing or expected performance. (84-003); 2: A systematic process of analyzing potential or existing areas of poor performance to establish training goals. (83-022)

Negative training

The exposure of a student to incorrect simulator response or configuration that the student could perceive as being correct or realistic or tacit endorsement of poor operating practices. (86-026)

Nonconsequential event

An event involving inappropriate human performance without adverse consequences. (90-005)

Normal operating range

The operating parameter values expected during normal equipment operation. (84-030, Rev. 1)

Note

A statement used to call attention to essential information of special importance or interest to aid in job performance. (TS-403)

NRMA

NRMA

Nuclear Records Management Association, Inc. (TS-403)

Nuclear network^o

Nuclear Network is a computerized communications network used to disseminate operating experience and other information to the industry. The operating experience information may be input by utilities, INPO, nuclear steam supply system (NSSS) suppliers, architect/engineers, or others. (85-020, Rev. 1)

Nuclear Plant Reliability Data System (NPRDS)

1: A data system designed to collect component engineering and failure data in nuclear plant safety-related equipment and other selected equipment that affects plant reliability. (86-002); 2: An information source providing reliability information on those systems and components necessary for accident mitigation or for which loss of function can initiate significant plant transients. (86-004); 3: A computer-based collection of engineering, operational, and failure data on components installed in U.S. nuclear plants. Systems and components within the scope of NPRDS have been selected based on their importance to safe and reliable plant operation. (90-011)

Nuclear power plant

Any plant using a nuclear reactor to produce electric power, process steam or space heating. (GPG-04) (83-022)

Nuclear power plant experience

Experience acquired in the preoperational and start-up testing activities or operation of nuclear power plants. Experience in design, construction, and operational training may be considered applicable nuclear power plant experience and should be evaluated on a case-by-case basis. Experience requirement are exclusive of time spent in the STA training program.

- (a) Experience acquired at military, nonstationary, propulsion, or production nuclear plants may qualify as equivalent to nuclear power plant experience on a basis of one year's credit for two years' experience up to a maximum of three years' credit.
- (b) Training may qualify as equivalent to nuclear power plant experience if acquired in reactor simulator training programs to a maximum of three months' credit.

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Nuclear power plant experience (continued)

- (c) On-the-job training may qualify as equivalent to nuclear power plant experience on a one-for-one time basis for up to a maximum of two years' credit.

(83-022) (85-025) (GPG-04) (90-003)

Nuclear reactor

Any assembly of fissionable material which is designed to achieve a controlled, self-sustaining neutron chain reaction. (GPG-04) (83-022)

INPO DEFINITIONS



Objective

A statement that identifies a specific result to be achieved. (86-019)

Observation

The act of recognizing and measuring overt trainee performance. (86-018)

Observation training

Structured, on-the-job training in duties of operations personnel at an operational power plant. (83-022)

Official Dosimeter (OD)

The personnel dosimeter used under normal circumstances to determine official dose equivalent (i.e., thermoluminescent dosimeters and film badges). (82-001-EPN-03)

Omission

Failure to perform an action. (OE-904)

On-the-Job Training (OJT)

1: Training conducted through participation in nuclear power plant construction, start-up, operation, maintenance, or technical services under the direction of experienced personnel. This training should include the systematic use of performance-based objectives, course schedules, tasks to be mastered, and task performance evaluations. (83-022) (84-003); 2: A training setting in which plant employees achieve learning objectives through training conducted in the job environment. (ACAD 90-010) (85-025) (86-026); 3: Participation in nuclear power plant startup, operations, maintenance, or technical services as a trainee under the direction of experienced personnel. (GPG-04)

Open-reference examination

An examination during which individuals may consult controlled material normally available in the control room. This may include written and static simulator examinations. (86-025, Rev. 1)

Operating logs

Operating logs

A recorded sequence of events or functions performed during a shift period. The logs will be hard-bound ledger or duplicate type books with numbered pages, kept in the various operating locations at the station, such as shift supervisor's office, control room, turbine building, and auxiliary building. (84-001)

Operational communications

Messages concerning the operation of the plant. (87-018, Rev. 1)

Operational plant

A nuclear power plant at which the reactor has been loaded with fuel. (85-025) (83-022)

Operations critical drawings

Those drawings and other design documents designated by the plant staff to be critical to the support of plant operations, maintenance, and testing activities. (85-013)

Operations training supervisor

The individual responsible to the training manager for the training program for licensed personnel, including the selection, planning, scheduling, and coordination of training activities and the assignment and evaluation of instructors. (86-025, Rev. 1)

Operator

- 1: Broadly defined as anyone authorized to operate equipment—in addition to operations department personnel, this definition could include chemistry, radwaste technicians, and other station personnel. (84-005, Rev. 1);
- 2: Person assigned to an operating shift position. (84-006, Rev. 1)

Operator aid log

A notebook containing the operator aid index and copies of all operator aids that are posted. (84-005, Rev. 1)

Operator aids

Information including sketches, notes, graphs, instructions, drawings, and other documents used to assist operators in performing assigned duties. (84-005, Rev. 1)

Override function

Out of sequence

Performance of correct action in wrong order. (OE-904)

Outstanding task report

This computer printout provides information on those tasks that have had task cards issued but have not been entered subsequently as completed. This report is generated weekly. (85-010)

Overdue task report

This computer printout provides notification of those outstanding tasks that have passed their due date, regardless of whether the grace period has expired. The computer automatically calculates overdue status. Daily surveillances are not included in this report. This report is generated weekly. (85-010)

Override function

- 1: The ability to interrupt as well as modify the data transfer from the simulator mathematical models of the simulator panel instrumentation. (ACAD 90-022);
- 2: The ability to interrupt computer simulation signals prior to reaching controllers and indicators on the simulator panels. (86-026)

INPO DEFINITIONS

P

Part-task simulator

A device that dynamically models selected plant functions presented in the control room. (83-006)

Parts location illustration

An exploded view, engineering drawing, photograph, or section view that provides positive and rapid location of equipment parts. (TS-403)

Performance

The result of the actions carried out by an individual to satisfy an objective according to a standard. (90-005)

Performance based training/instruction

A systematic program of instruction designed around tasks and the related knowledge and skills required for competent job performance. (87-010) (83-022) (84-003) (87-004) (87-008)

Performance check

A quality control measurement to verify stable performance of an instrument. The continued validity of the calibration may not be ensured by the performance check, although often the data generated in the calibration of the instrument may be used as a performance check to verify continued stable instrument performance. (83-016, Rev. 2)

Performance monitoring

Systematic monitoring and trending of the performance of selected plant systems and components to measure and assess the impact of any performance changes on overall plant efficiency, reliability, and availability. (85-037)

Performance problem

The inability to fulfill a required function. (90-004)

Performance-based instruction

Performance-based instruction

1: A systematic program of instruction designed around the tasks and their related knowledges and skills required for competent job performance (84-003) (83-022); 2: . . . The derived knowledge and skills for each task are organized into terminal and enabling learning objectives that are composed of related conditions, actions, and job standards. (82-026)

Performance-based training

A systematic program of instruction designed around tasks and the related knowledge and skills required for competent job performance. (ACAD 90-010) (86-018)

Performance test

1: Any test or series of tests performed on a DRD for the purpose of verifying its operating characteristics. The normal performance test consists of a radiation response check and an electrical leakage (drift) test, as well as a physical inspection. Occasionally, such a performance test is also referred to as a "calibration" or "calibration check." Acceptance criteria are per References 1 and 2. (82-001-EPN-02); 2: A test of a system or component to verify that required performance characteristics can be achieved, to detect any abnormal performance characteristics, and to determine the effect of maintenance and operating activities on equipment performance. (85-037)

Periodic maintenance

Maintenance (activities) accomplished on a routine basis ([typically based on] operating hours or calendar time), which may include any combination of (external) inspections, alignments or calibrations, (internal inspections) overhauls and component or equipment replacements. (5480.MAINT) (86-021)

Permanent information

Information that appears on a medium not suitable to change and determined by the operations manager to be applicable indefinitely—An example would be an instruction engraved on a permanent label. Information posted in this format is not considered to be an operator aid in this procedure and should be controlled in accordance with design change requirements, if applicable. (84-005, Rev. 1)

Physical fidelity

1: The degree of similarity between the simulator and the plant (reference unit) in the physical location of panels, equipment, instruments, controls, and their related form and function. (ACAD 90-022); 2: The degree of similarity between the simulator and the reference plant in the physical design and location of the panels, equipment, instruments, and controls. (86-026) (87-016)

Planned maintenance

Activities performed prior to equipment failure. These may be initiated by predictive or periodic maintenance results, by vendor recommendation, or by experience. (86-021)

Plant changes

Plant modifications that affect plant hardware, design, operation, response, or control. (87-016)

Plant communications phone

An electrically powered party line communications system usually used in conjunction with the plant paging system. (87-018, Rev. 1)

Plant dial phone

A dedicated private branch exchange (PBX) system that allows for a large number of independent communications between specific points in the plant. (87-018, Rev. 1)

Plant engineering

An on-site engineering group that provides technical information and requirements for storage controls. They shall be familiar with specific plant details and may be part of the storeroom department or function as a plant support group. (85-023)

Plant Equipment Index (PEI)

A plant equipment index provides lists of mechanical equipment, electrical equipment, valves, and instruments. It is sometimes referred to as the plant equipment data base. (86-002)

Plant hardware

Existing equipment, controls, indications, and instrumentation in the plant. (83-006)

Plant paging system

Plant paging system

A public address system that should be heard in all operating areas of the plant. (87-018, Rev. 1)

Portable radios

Any radio communications system where at least one station is remote and portable. (87-018, Rev. 1)

Post-maintenance test

1: Any appropriate testing performed following maintenance to verify that a particular piece of equipment or system performs its intended function based on its design criteria and that the original deficiency has been corrected. (87-028); 2: . . . and no new deficiencies created. (90-023)

Post-secondary level

A term used to identify training or education at a level beyond high school. The term is usually used in connection with vocational courses. Student responsibility is greater than is expected of high school students. The difficulty and complexity of the courses is comparable to undergraduate courses offered in colleges and universities. Undergraduate college and university courses fall within the meaning of the term as used in this document. (82-022)

Potential problem

1: A situation where inappropriate human performance comes close to occurring or could occur under the "right set" of conditions. (90-005); 2: A human performance situation that warrants evaluation due to its potential for causing or contributing to an inappropriate action. Example: An auxiliary operator (AO) and a control room operator jointly reported that two-way radio communication was interrupted when the AO entered the auxiliary feed water pump room. Sound powered phones were the only operable mode of communication remaining for accomplishing safe shutdown outside the control room. (OE-904)

Potentially contaminated

All material items, including tools and equipment, that have been stored or used within the station's RCA and have not been monitored for unrestricted use. (89-008)

Preventive Maintenance (PM)

Power plant experience

Experience acquired in the construction, testing, operation, and maintenance of power generating facilities. Experience in design, construction, and operational training may be considered applicable power plant experience and should be evaluated on a case-by-case basis. (84-003) (GPG-04) (83-022) (85-025)

Practice

Skill performance or an exercise for attaining proficiency. (86-018)

Pre-operational testing

Testing of a system to ensure that the operation is in accordance with design and functional requirements. (CP-201)

Precritical plant

A nuclear power plant at which the reactor has not received its initial fuel load. (85-025) (83-022)

Predictive maintenance

May include vibration monitoring, calibration checks, etc. (86-021)

Preliminary safety assessment

A systematic review of events preceding and following a reactor trip conducted to determine if the plant exceeded specified limits. (84-029)

Presumable events and causal factors

Actions or conditions that are assumed because they appear logical in the sequence. (OE-904)

Preventive Maintenance (PM)

1: Includes predicative, periodic, and planned maintenance actions taken to maintain a piece of equipment within design operating conditions and extend its life without changing factors that affect design criteria. (87-028);
2: Predictive, periodic, and planned maintenance actions taken to maintain a piece of equipment within design operating conditions and extend its life. (86-021); 3: Maintenance actions taken to maintain equipment within designed operating conditions and extend its life—PM includes predictive, periodic, and planned maintenance actions. (90-023);

continued on next page

Preventive Maintenance (PM)

Preventive Maintenance (PM) (continued)

4: Predictive, periodic, or planned maintenance actions performed prior to equipment breakdown or to prevent equipment breakdown. The distinction between predictive, periodic, and planned maintenance is as follows:

- (a) **Predictive** methods used to analyze and predict equipment performance so that planned action can be taken to correct abnormalities—The following areas are typical examples: Such methods include for example:
 - (a) vibration analysis
 - (b) acoustic analysis
 - (c) lube oil analysis
 - (d) non-destructive examination
 - (e) in-service inspection
 - (f) infrared inspection
 - (g) observed abnormal conditions

- (b) **Periodic** action taken on a routine basis (e.g., calendar hours, run time) on equipment to prevent breakdown, such as the following: Such actions include for example:
 - (a) lubrication
 - (b) cleaning
 - (c) testing
 - (d) adjustments
 - (e) calibration
 - (f) inspection
 - (g) filter changes

Typically, any faults found are addressed by corrective maintenance or planned maintenance.

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Preventive Maintenance (PM) (continued)

- (c) **Planned** maintenance that is done prior to equipment failure—
This can be initiated by predictive or periodic maintenance results,
by vendor recommendation, or by experience. This includes items
such as the following:
 - (a) scheduled valve repacking (see INPO 83-024, MA-306)
 - (b) replacement of bearings as indicated from vibration analysis
 - (c) major or minor overhauls based on experience factors or vendor recommendations
 - (d) replacement of known life span components

Planned maintenance is typically done during outages or on spare or redundant equipment that is available during plant operation. (85-032)
(85-037)

Procedures

Documents describing how an activity is to be performed, including maintenance, operating, and surveillance procedures and instructions.
(87-009)

Procurement contract

The legally binding agreement between the utility and the vendor stipulating the physical requirements of the equipment and the additional legal requirements of the agreement. It includes:

- (a) the equipment specification, with any engineering-approved vendor exceptions
- (b) the vendor manual specification, with any engineering-approved vendor exceptions
- (c) the general conditions of the contract
- (d) the purchase order

(TS-403)

Procurement management

The organization within the utility that is responsible for direct contacts with vendors during purchasing activities—this organization serves as the intermediary between design engineering and the vendor during purchasing negotiations. (TS-403)

Protection system challenge**Protection system challenge**

An event that results in initiation of the actuation sequence for either the reactor protection system or an engineered safeguards system. (84-019)

Pulled circuit card

A circuit card that has been removed (or pulled to the point of disconnect) from its designated location so that the intended function has been disabled.
(85-016, Rev. 1)

Purchase documents

Documents that describe the item(s) to be purchased. These include requisitions and purchase orders (P.O.) with equipment specifications and requirements. (85-023)

INPO DEFINITIONS

Q

Q-list

A listing of plant equipment and components that contains those items that require extra quality measures due to their importance to the safe and reliable operation of the plant—All safety-related and important non-safety equipment are included in the Q-list. (TS-415)

Qualifications

The combination of an individual's physical attributes and technical, academic, and supervisory knowledge and skills developed via training, education, and demonstrated on-the-job performance and/or experience. (85-025) (87-010) (82-026) (86-018) (84-003) (82-022) (83-0221) (87-008)

Qualifier reviewer

A member of the plant staff who either holds a current NRC Senior Reactor Operator's (SRO) license or has been certified by the plant manager as meeting the Level II requirements of ANSI N45.2.6-1978. (84-020)

Quality control chart

A quality control chart shows the sequential plot of a sample parameter with the vertical scale plotted in units of the test results and the horizontal scale in the units of time. The plot should have a center line and control limits. (83-016, Rev. 2)

Quiz

A relatively short test used to measure achievement of objectives on material recently taught or (on) from any small, newly completed unit of study. (85-025) (83-032) (GPG-04) (83-022)

INPO DEFINITIONS

R

Radiation response check

Verification of DRD accuracy using a radiation source with a known exposure rate. The normal check consists of a single exposure; however, multiple checks may be performed at the same or different exposures to verify precision or linearity. Acceptance criteria are per References 1 and 2. (82-001-EPN-02)

Radiological protection deficiency

A condition that if allowed to exist could result in the contamination of personnel and areas, unnecessary radiation exposure, and generation of excessive radiological waste. Examples of radiation protection deficiencies are provided in Attachment D. (87-023)

Radiologically Controlled Area (RCA)

That portion of the station administratively controlled due to radiological protection concerns. (89-008) (88-004)

RCA tools and equipment

All non-installed items commonly used to perform or assist in work functions within the station's RCA. These items are not normally designed to perform highly specialized tasks and include such items as hand tools, power tools, electrical cords, hoses, chainfalls, scaffolding, ladders, and calibrated test equipment. (89-008)

Reactor Operator (RO)

Any individual who possesses an operator's license pursuant to Title 10, Code of Federal Regulations, Part 55, "Operators' Licenses." (86-026) (86-025, Rev. 1)

Reactor trip (scram)

A manual or automatic insertion of control rods into the reactor core to interrupt the reactor's ability to sustain a chain reaction and the subsequent plant response. (84-029)

Recurring event

An event that has happened before or, following evaluation, is determined to have root causes similar to those identified as contributing to previous events. (90-004)

Reference plant

Reference plant

The specific nuclear power plant from which the simulator control room configuration, system control arrangement, and simulator data base are derived. (86-026) (87-016)

Reference unit

The specific nuclear power plant unit from which the simulator control room configuration, system control arrangement, and simulator design data are derived. (ACAD 90-022)

Reference validation

Method of validation whereby data developed in a common EOP validation program is referenced by similar plants. (83-006)

Release of clearance

Occurs when personnel who have been working under a clearance release their right to work and their right to protection under the clearance by signing the clearance sheet. (87-002)

Reliability

Reliability is a measure of the ability of a plant, system, or a component to operate properly when called upon. For example, repeated trips of the main turbine have a severe impact on plant reliability, but the steam cycle efficiency is not affected. (86-004)

Remedial training

Training provided to an individual or crew as a result of inadequate performance on oral, written, or performance examinations. The intent of this training is to refresh and upgrade specific knowledge and skills related to licensed operator responsibilities. (86-025, Rev. 1)

Removable contamination

Contamination that adheres loosely to a surface and is easily transferred to other surfaces by contact or by air currents. Fixed contamination can be transformed into removable contamination by activities such as welding, burning, or grinding on the material. (89-008)

Requalification exam

The tests that comprise the licensed operator requalification examination, including written, simulator and walk-through modes. (86-205, Rev. 1)

Root cause

Required available hours

The hours during which the system or a component is required to be operable.

Note: Components and subsystems are required to be operable in this definition even though the plants's technical specifications may allow their removal from service for a limited time. (86-021)

Requisition

A requisition is defined here as a written authorization for a designated person(s) to be issued a specified quantity of chemical to be used, handled, and disposed of in accordance with prescribed instructions. The instructions, which can be included on the requisition, will define limitations and/or precautions regarding use, detrimental effects, recommended actions for spillage, and labeling requirements. The requisition form shall be approved by the supervisor of the work group that is to use the chemical. (85-021)

Review

To inspect, re-examine, or evaluate. (85-014)

Reviewer

Any individual who performs a review, including lead auditors, reviewers, technical specialists, and others, such as management representatives and auditors in training. (85-014)

Review Process

The sequence of events beginning with notification of the activity to be reviewed ending with the review closure letter. (85-014)

Root cause

1: A causal factor(s) that, if removed, ensures that the undesirable human performance situation would not recur. In many cases, two or more causal factors may interact synergistically as a single root cause. Example: After an outage, a feedwater isolation valve was left closed to prevent overfeeding of the steam generator, but no mention was made to the next shift nor was a log book entry made. Later during startup, the unit scrambled due to lack of feedwater because the valve was not reopened. The root cause was the failure to properly communicate the fact that a valve was left in the abnormal position. If a note had been made in the log book or if the status had been turned over at shift change, the closed valve most likely would not have caused the event. (OE-904); 2: The fundamental cause(s) and associated corrective action(s) that, if corrected, will prevent recurrence of an event or adverse condition. (90-004) (90-005)

Root cause analysis

Root cause analysis

Any method(s) used to identify (a) root cause(s) of performance problems or adverse trends and (b) associated corrective action(s). (90-004) (90-005)

Round sheet

A record of those system parameters that are to be recorded for equipment and areas located within the responsibility of a particular shift station. These include maximum and minimum acceptable operating parameter values for appropriate equipment. Additionally, space is provided for operator comments. (84-030, Rev. 1)

Rule of thumb

Simple skin dose calculation equations—inputs to the equations are duration of exposure and count rate for the contamination survey. The equations are nuclide dependent and should be developed for each station separately. (88-004)

INPO DEFINITIONS

S

Safety analysis report

The most recent NRC-approved safety analysis report (either preliminary or final), as well as other safety analyses submitted in support of final safety analyses report updates or other license amendments. (TS-415)

Safety evaluation

The documented determination of whether a proposed change, test, or experiment involves an unreviewed safety question. See definition 4.6 and reference 3.3. (86-024) (TS-415)

Safety review

1: The documented determination of whether a proposed change, test, or experiment involves an unreviewed safety question. (TS-415); 2: A review performed by a technically competent engineer to determine if a proposed change to any system or equipment could have any adverse impact on plant or personnel safety. A thoroughly performed or documented 10CFR50.59 evaluation could meet the intent of a safety review. (85-016, Rev. 1)

Scenario

1: An outline of the sequence of events expected during a training or evaluation exercise. It includes individual and team training goals, shift turn-over information, initial conditions, simulator malfunctions, plant response, topics for discussion, and termination criteria. (90-003) (86-025, Rev. 1); 2: An outline of the sequence of events during a simulator training exercise: includes the exercise's initial conditions, planned evolutions, malfunctions, transients, and expected plant response. (86-025); 3: A structural plant of parameter and plant symptom changes that provide operating cues for the conduct of assessment. (83-006); 4: A description of the sequence of events during a simulator training exercise; includes the exercise's initial conditions, planned evolutions, malfunctions, transients, and expected plant response. (86-026)

Segment

A subsection contained within a module. Each module is divided into several subsections or segments, the sum of which encompasses the entire instructional requirements for the operator position contained therein. (GPG-04)

Self-study

Self-study

A training setting without a full-time instructor in which the conditions are provided in the training materials or in the plant when needed by the trainee. (86-018)

Self-study guide

A concise statement of information meant to achieve specified performance objectives in a self-paced learning activity. Self-study guides normally are prepared for those situations in which individuals are unable to attend group instruction. (EP-804)

Senior control room operator

The senior licensed operator who directs the activities of control room operators on shift, reports directly to the shift supervisor, and is typically responsible for supervising the operation of one (or more in a multi-unit, single control room plant) reactor/turbine-generator unit(s) at a generating station. (85-025) (83-032) (83-022)

Senior Reactor Operator (SRO)

Any individual who possesses a senior reactor operator's license pursuant to Title 10, Code of Federal Regulations, Part 55. "Operators' Licenses." (86-025) (86-026) (86-025, Rev. 1)

Senior station line management

Those utility managers, normally located at the site, who have line responsibility for one or more functional areas—e.g. operations manager, maintenance manager, plant manager, assistant plant manager, etc. (86-025, Rev. 1)

Senior utility line management

Those utility managers who have line responsibility for overall plant operation (e.g., vice president of nuclear operation, site vice president, etc.) (86-025, Rev. 1)

Sequence of events printout

A hard-copy log of digital occurrences during a transient, e.g., trip signals, breaker open/close, bistable actuations, etc. (84-029)

Shelf life

A specific period or interval of time after which a stored item may not meet its original design specifications, quality, or manufacture requirements. (85-023)

Shift operating practices

Actions and checks required as a minimum of every operator as he conducts his routine duties. (84-030, Rev. 1)

Shift Supervisor (SS)

1: The senior licensed individual on shift directly responsible for overall plant operations. (86-025, Rev. 1); 2: The senior licensed individual on shift who is directly responsible for overall plant operations, including activities affecting safety and operations on site. (86-026) (GPG-04) (85-025) (83-032) (83-022)

Should and may

The word "should" is used to denote a recommendation; and the word "may" to denote permission. (87-018, Rev. 1)

Significant Event Evaluation and Information Network (SEE-IN)

Managed by INPO for the purpose of screening nuclear plant events occurring worldwide and disseminating information on those events considered by INPO to be significant to safety and reliability. The SEE-IN Program is described in Reference 3.2. Information provided by plants on significant in-house events with generic implications is a key input to SEE-IN. (85-019, Rev. 1) (85-020, Rev. 1)

Simulation

A training strategy that imitates a realistic job environment using realistic activities. (86-018)

Simulator capabilities/limitations

The extent to which the computer can reliably simulate plant conditions under various situations. (86-026)

Simulator configuration management

A system that ensures that simulator appearance and performance reflect the reference plant as closely as possible. (87-016)

Simulator validation

Method of validation whereby control room operators perform actual control functions on simulated equipment during a scenario for an observer/reviewer. (83-006)

Skills training

Skills training

Instruction provided for the purpose of developing or improving an individual's ability to manipulate controls and to anticipate and recognize the effects of these manipulations while performing an evolution. (86-025, Rev. 1)

Skin contamination limit

5000 dpm or greater per 100 square centimeters of surface area on the skin or hair of an individual. (88-004)

Snapshot

A set of simulated plant condition temporarily stored in the simulator's computer memory from which simulation can be restarted. (87-016)

Snapshot function

1: The storage of existing simulated reference unit status at any point in time for later recall as an initialization condition. (ACAD 90-022); 2: The process of stopping and storing simulated plant parameters. (86-026)

Software

Computer programs and data files containing programmer-specified constants, flags, and setpoints—this includes programs that generate displays of system configurations, technical specification applicability, and similar items relied upon by operators and technical personnel to operate the plant. (86-024)

Software design review

The formal process of reviewing, confirming or substantiating the technical adequacy of a software design or modification to an established standard. (86-024)

Software security

Measures taken to protect the integrity of computer software from unauthorized modification caused by human error or equipment failures. (86-024)

Sound powered phone

A party line or dedicated line providing communications between two or more specific stations without the need for external power. (87-018, Rev. 1)

Special locked throttled

A designation for throttled valves and ventilation dampers in plant systems that have been positioned during system flow balance testing and control critical system operating parameters. (87-003)

Special review

A review performed when directed by the plant manager or as a result of an unusual incident such as an accident, an unexpected transient, significant operator error, or major equipment malfunction where inadequate procedural controls may have contributed to the incident. (84-020)

Spiked sample

A sample or standard for which the composition, with respect to the element or compound of interest, is known and for which the overall makeup approximates that of the samples normally analyzed at the nuclear power plant. (83-016, Rev. 2)

Split sample

A homogeneous sample in which two or more portions are analyzed independently by two or more persons or laboratories. (83-016, Rev. 2)

Stable condition

Period of time when no evolutions (surveillances, power level, or equipment changes in progress, etc.) are in progress that would normally require the attention of or probable response of an operator. (84-006, Rev. 1)

Standby system

A system not in continuous operation but available for service upon demand. Safety systems are typically standby systems. (86-021)

Static simulator exam

A simulator that has been "frozen" with a plant transient in progress for the purpose of testing the operator's ability to recognize abnormal plant conditions. (86-025, Rev. 1)

Storage controls

Controls applied during purchasing, receiving, packaging, and storing of items to ensure that they are maintained properly. (85-023)

Storeroom

Any facility designed or used for receiving, storing, and issuing items. (85-023)

Subjects

Subjects

General training areas such as "supervisory/management skills" under which the more detailed, related "topics" are listed. Subjects are divided into three categories: (a) leadership and management, (b) technical, and (c) administrative. Each "subject" has a statement of purpose as guidance for the utility in determining the depth of knowledge needed in the particular "subject." The level of knowledge will vary from general familiarization in some subjects/topics to an in-depth knowledge in other subjects/topics. (ACAD 90-010)

Summary report

This computer printout provides scheduling information for all tasks in the data base. This report is generated monthly. (85-010)

Surveillance cross-reference

This is a listing of all surveillance procedures and the associated technical specifications requirements or other commitments. The list can be generated either in surveillance procedure numerical order or technical specification numerical order. (85-010)

Surveillance test

A functional test of installed equipment and/or systems to satisfy technical specification operability requirements. (87-028)

Surveillances

Functional tests of installed equipment and/or systems. (85-032)

Swing clearance

The movement envelope within which the snubber must operate without restriction from the cold installed position to the hot operating position. (86-014)

Symptom

A plant characteristic that directly or indirectly indicates plant status. (83-006)

Symptoms

Plant characteristics that directly or indirectly indicate plant status. (83-004)

Synergism

The process whereby the performance of a team of individuals is more effective than the sum of the individual contributions. (86-025) (86-026)

Systemic factor

System engineer

- 1: An individual with an engineering degree or a strong demonstrable technical background who is assigned the responsibility of maintaining expertise in a designated plant system(s) and/or area(s). (TS-403) (85-033);
- 2: An individual with an engineering degree or equivalent who is assigned responsibility for a designated plant system(s). (86-021)

System expert

An individual assigned the responsibility of maintaining a high level of expertise in a designated plant system(s) and/or area(s). (84-020)

System model

A representative of a system that can be used to calculate the system's unavailability based on the unavailability and functional relationship of the components in the system. Common system modeling techniques include fault tree analysis, GO analysis methodology, and availability block diagrams analysis. (86-021)

System test

A system test quantifies overall system(s) performance or at least the performance of more than one component. System tests also may provide performance data for specific components. (86-004)

System turnover

The turnover of systems or subsystems from construction to the testing organization so that testing may begin. (CP-201)

System unavailability

The probability that a system is unable to perform its normal design function during the time it is required to be available for service. The system unavailability for a specified period of time is a calculated value obtained from a system model using component unavailability data. (86-021)

Systemic factor

A type of causal factor not directly contributable to the individual and established by management, i.e., communications, procedures, work place, work organization, work schedule, training, and change implementation. (OE-904)

INPO DEFINITIONS

T

Table-top validation

Method of validation whereby personnel explain and/or discuss procedure steps for an observer/reviewer in response to a scenario or as part of an actual industry operating experience review. (83-006)

Task

1: (A task is) a well-defined unit of work with (having) an identifiable beginning and end, and two or more elements. (84-003) (86-018) (87-008) (87-010); 2: A well-defined unit of work, having two or more elements with an identifiable beginning and end. (83-022) (83-032) (84-003); 3: Any surveillance or periodic work item. (85-010)

Task analysis

1: The systematic process of examining a task to identify conditions, standards, elements, and required knowledge and skills. (ACAD 90-010) (86-018) (87-008) (87-010); 2: The systematic process of examining a task using data derived from job incumbents in order to identify conditions, standards, elements, and skills or knowledges associated with the performance of the task. (82-026) (83-022) (84-003)

Task cards

These cards are printed by the computer and identify each task, its due date, and other pertinent information. The performance of a task is initiated by printing both the corresponding task card and an attached copy. (85-010)

Task change request form

This data entry form is used to add, change, or delete the scheduling information contained in the data base. This form is not used to enter task completions. (85-010)

Task qualification

The combination of education, experience, and training that recognizes that an individual has the knowledge and skills to perform a specific task independently. (86-018) (87-008) (87-010)

Team training

Team training

1: The training of individuals assigned to work together as a control room team so that their abilities to safely operate the plant combine in a synergistic manner. (86-025, Rev. 1) (86-026); 2: The training of individuals assigned to work together as a control room team so that their combined ability to safely operate the plant is greater than the sum of the individual's abilities. (90-003)

Technical review

The formal process of reviewing, confirming, or substantiating the technical adequacy of a change to an established standard. A technical review consists of a design review and a safety review. (TS-415) (87-006)

Technical reviewer

An individual qualified to perform technical reviews (e.g., design reviews and safety reviews)—Technical reviewers will be qualified in accordance with Section 6.3. (TS-415)

Temperature rise

The increase in circulating water temperature from the inlet to outlet of the condenser. (84-035, Rev. 1)

Temporary modification

Temporary minor alteration(s) made to plant equipment, components, or systems that do not conform with approved drawings or other design documents—These alterations are temporary in that they are expected to be installed for six months or less (a short duration). The following are examples of temporary modifications:

- lifted leads
- electrical jumpers
- pulled circuit cards
- disabled annunciator alarms
- mechanical jumpers/bypasses
- temporary setpoint changes
- installed or removed blank flanges
- disabled reliefs or safety valves
- installed or removed filters or strainers
- plugged floor drains
- temporary pipe supports

(85-016, Rev. 1) (TS-415)

Temporary modification log

A log maintained by operating personnel in the control room. This log will consist of the Temporary Modification Index (Attachment A) and all active Temporary Modification Sheets (Attachment B). Each temporary modification will have a unique number assigned. (85-016, Rev. 1)

Temporary modification tag

A numbered tag (Attachment C) used to identify all temporary modification devices in accordance with this procedure. (85-016, Rev. 1)

Terminal Learning Objective (TLO)

Objectives derived using task analysis and are to be attained during training. TLOs contain job-related conditions, actions, and standards that are supported by a sequence of enabling learning objectives. (82-026)

Terminal temperature difference

The difference between inlet steam temperature and the cooling water outlet temperature. (84-035, Rev. 1)

Test

A device or technique used to measure trainee mastery of the learning objectives. (86-018)

Tickler file

A file that serves as a reminder and is arranged to bring matters to timely attention. (85-023)

Topic

Specific skill and/or knowledge--Topics form a "subject" area for training. (ACAD 90-010)

Training

1: A formalized instruction, direction, and/or indoctrination that provides the knowledge, skill, and proficiency required for an individual to become qualified. (84-003); 2: Instruction designed to develop or improve the on-the-job performance of a trainee or worker. (82-022)

Training cycle

The amount of time required to present the material of one training period to all licensed individuals. (86-025, Rev. 1)

Training manager

Training manager

1: The individual with overall responsibility for an organizations' training program, including training staff qualifications, the quality of training conducted, and the content of the training programs. (82-026); 2: The individual with overall responsibility to line management for the station's training activities--this includes training staff qualifications, the quality of training conducted, and the content of the training programs. (86-025, Rev. 1)

Training program

A planned, organized sequence of activities designed to prepare individuals to perform their jobs. (82-026)

Training supervisor

1: The individual responsible for the day-to-day training activities at a facility, including the planning and scheduling of training and the assignment and evaluation of instructors. (82-026) (83-022) (85-025); 2: The individual responsible to the training manager for the continuing training program for licensed personnel, including the planning, scheduling, and coordination of training activities and the assignment and evaluation of instructors. (86-025)

Transient locations

Usually are identified as businesses, recreational facilities, lodging establishments, and places where transients would go for information about the area. (87-029)

Transients

Generally are defined as persons who are not permanent residents within the EPZ but who could be inside the EPZ during an emergency. (87-029)

Transportation

Correct action on wrong unit, system, train, or component. (OE-904)

Trend analysis

The systematic evaluation of data to monitor and identify changes in equipment performance. (85-037)

Trend graphs

Trend graphs provide a sequential plot of sample parameters with the vertical scale plotted in units of the test results and the horizontal scale in units of time. The plot characteristically will have a zero deviation point and upper/lower warning and control points. (85-039)

Trouble analysis chart

Trends

Trends are defined as detectable changes in analytical data in a general direction over a specific period of time. (85-039)

Trouble analysis chart

A table that lists the types of trouble, (e.g. lube oil system trouble, failure to start), matrixed with the following information:

- 4.10.1 Symptoms,
- 4.10.2 Immediate action,
- 4.10.3 Probable cause,
- 4.10.4 Remedy

(TS-403)

INPO DEFINITIONS

U

Ultraviolet light

Ultraviolet light is that portion of the spectrum just beyond the violet on the short-wave length side (generally 180-3,900 angstroms) emitted by sunlight and the carbon, mercury-vapor, Tungsten, and Kronmeyer lamps. (86-001)

Unreviewed safety question

A safety issue that has not been previously analyzed or adversely affects the accident analyses and safety margins of the safety analysis report or technical specification bases—proposed modification involves an unreviewed safety question under the following circumstances:

- (a) The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased.
- (b) The possible accident or malfunction of a different type evaluated previously in the safety analysis report may be created.
- (c) The margin of safety as defined in the basis for any technical specification is reduced.

(TS-415) (86-025, Rev. 1)

Untimely act

Action performed but not at or within the proper time. (OE-904)

Upper/lower control point

The upper/lower control point is the point above which or below which the recommended chemistry specification will be exceeded, and corrective action should be initiated promptly. There may be multiple upper/lower control points with different levels of action. (85-039)

Upper/lower warning point**Upper/lower warning point**

The upper/lower warning point is the point above which or below which the chemistry parameters are still satisfactory but indicate a need to identify the reason for the increase or decrease and for subsequent correction. There may be multiple upper/lower warning points with different levels of action.
(85-039)

Utility (owner organization)

The organization, including the on-site operating organization, which has overall legal, financial and technical responsibility for the operations of one or more nuclear power plants. This includes personnel contracted by the utility.
(GPG-04) (83-022) (84-003) (85-025)

INPO DEFINITIONS

V

Validation

The evaluation performed to determine that the actions specified in the procedure can be performed by the operator to manage the emergency conditions. (82-013)

Valve mispositioning

Valve placed, left, or found in the wrong position. (OE-904)

Vendor manual

A manual supplied by an equipment manufacturer that contains information concerning the installation, operation, and maintenance of supplied equipment. (TS-403)

Vendor manual specification

The portion of the procurement contract that identifies the requirements for the format, content, and delivery schedule of vendor manuals for purchased equipment. (TS-403)

Vendor manuals

Technical information supplied by equipment manufacturers that addresses installation, operation, and maintenance of the equipment. This includes all drawings, parts lists, and other information in the manual. (87-009)

Verbal communications

Messages that are transmitted by voice and received by ear (written notes or other physical aids may be used in conjunction with verbal communication to aid in remembering the specific details of the message). (87-018, Rev. 1)

Verification

1: The evaluation performed to confirm the written correctness of the procedure to ensure that the generic and plant-specific technical aspects have been properly incorporated. (82-013); 2: An act of ensuring a condition conforms to the specified requirements. (87-002) (87-003)

Verification analysis

An analysis performed to verify the accuracy of an in-line chemistry monitor. Some utilities refer to this as a "cross-check" analysis. (83-016, Rev. 2)

Voluntary reporting

Voluntary reporting

Proactive reporting of events and potential problems to management by plant personnel. (90-005)

INPO DEFINITIONS

W

Walk-down

A detailed review of each control board by the oncoming and off-going operator. Items checked should include alarm annunciators and valve positions. (84-006, Rev. 1)

Walk-through

A supervised training exercise conducted in the plant in areas such as the remote shutdown panel for the purpose of developing and maintaining skills required to cope with plant abnormal/emergency conditions. Task performance is generally simulated. (86-025, Rev. 1)

Walk-through exam

An examination to assess the individual operator's knowledge and skill associated with tasks that the operator may be required to perform or direct. This could include oral examination, job performance measures, and on-shift evaluations. (86-025, Rev. 1)

Walk-through validation

Method of validation whereby control room operators conduct a step-by-step enactment of their actions during a scenario for an observer/reviewer without carrying out the actual control functions. (83-006)

Warning

A statement used to call attention to a step of a procedure which, if not strictly followed, could result in injury to personnel. (TS-403)

Whole-body contamination monitor

Monitors containing several detectors positioned to simultaneously monitor the entire body for radioactive contamination. (88-004)

Work instructions

Work instructions

Instructions that provide installers guidance in sufficient detail to accomplish their assigned task—The detail required should be commensurate with the job knowledge level of the installer and the complexity of the task. It should reference the applicable procedures (e.g., welding), data sheets, and drawings that are required to complete the task. It may also identify special requirements (e.g., permits, QA hold points, notifications, specifications) that must be met. (85-013)

Work request

A work control document that is used to control and record the correction of plant material deficiencies from the time of identification until the satisfactory completion of the corrective action. (83-045)

Work supervisor

The job supervisor or foreman who directly oversees the work performed. (82-001-OEN-08A)

Writers guide for EOPs

A document that provides instructions for writing EOPs, using good writing principles. (82-016, Rev. 1) (83-004) (83-006) (82-013)

Written exam

An examination used to assess an operator's knowledge of plant systems, procedures, and operating limits including technical specification. It may include the use of a static simulator. (86-025, Rev. 1)

INPO DEFINITIONS

X

There are no definitions included in this section of the INPO dictionary.

INPO DEFINITIONS

Y

There are no definitions included in this section of the INPO dictionary.

INPO DEFINITIONS

Z

Zero deviation point

The zero deviation point is the optimum level for a chemistry parameter.
(85-039)

Rocky Flats Plant (RFP) References

The following references are for RFP Acronyms and Definitions. This compilation of references are in alphabetical order.

Conduct of Operations, (COOP), 4/9/91

Cost Accounting, (Cost Acctg), Rocky Flats Cost Accounting Department, 7/91

Emergency Preparedness Manual, (EPM), OCCURRENCE CATEGORIZATION PROCEDURE, 2/28/91

Environmental Restoration & Waste Management Procedure Writers Guide, Rev. 0, (ER&WM Adm. Manual), 8/2/90

Health and Safety Practices, (HSP)

Nuclear Materials Safeguards Procedure Manual, (NMSPM), 3/90

Operations Review Committee Administrative Resumption Procedure, Rev. 0, (ADM-02.01, Rev. 0), 10/12/90

Operational Safety Requirements, (OSR, Rev. 1), FSAR-Building 707, Chapter 7 - OSR, Rev. 1, 2/25/91

Performance Assurance Procedures Group, (PAPG):

PAPG-001, Rev. 1, RESUMPTION TECHNICAL PROCEDURES PREPARATION PROCESS, 02/18/91

PAPG-002, Rev. 1, RESUMPTION ADMINISTRATIVE PROCEDURES PREPARATION, 02/18/91

PAPG-003, Rev. 1, RESUMPTION PROCEDURES WRITERS GUIDE, 02/18/91

PAPG-004, Rev. 0, RESUMPTION PROCEDURE CONTROL, 08/15/90

Plant Administrative Manual, (PAM), 1-10000 ADM, 4/1/91

Policy Manual

Production Control Handbook, (PCH), 10/25/90

Quality Assurance Manual, Rev. 1, (QAM), 5/28/91

Records Management Manual, (RMM), 10/89

Rocky Flats Dictionary, (First Edition), 1989

Shift Orders Manual, (Shift Orders Manual), Standing Order 7, 3/90

Training User's Manual, (TUM, Rev. 1), Performance-Based Training, 2/4/91

Transportation Manual, (Transportation Manual), Traffic Department, 10/8/90

Writing Effectively, A Handbook for Technical Writers at Rocky Flats Plant, (Writing Effectively), Performance-Based Training, 1/90

Compound Words References

The Style Guide for Technical Publications, Department of Interior, Bureau of Reclamation,
October 1983

Department of Energy (DOE) References

DOE 1000.2, DEPARTMENT SEAL AND FLAG, 08/25/78
DOE 1000.3B, INTERNAL CONTROL SYSTEMS, 07/05/88
DOE 1200.1, POLICY AND PROCEDURES FOR DEPARTMENTAL NEWS MEDIA ACTIVITIES,
11/26/84
DOE 1240.2A, UNCLASSIFIED VISITS AND ASSIGNMENTS BY FOREIGN NATIONALS, 01/19/89
DOE 1270.2A, SAFEGUARDS AGREEMENT WITH THE INTERNATIONAL ATOMIC ENERGY
AGENCY, 07/29/83
DOE 1300.3, POLICY ON THE PROTECTION OF HUMAN SUBJECTS, 08/23/90
DOE 1321.1B, Change 1, DEPARTMENTAL DIRECTIVES SYSTEM, 03/14/85
DOE 1322.2B, FORMS MANAGEMENT, 05/27/87
DOE 1322.3C, DIRECTORY OF DEPARTMENTAL FORMS, 11/29/89
DOE 1324, IDENTIFYING AND HANDLING OFFICIAL RECORDS AND PERSONAL PAPERS (Draft),
03/27/90
DOE 1324.2A, RECORDS DISPOSITION (ATTACHMENT 1), 09/13/88
DOE 1324.3, FILES MANAGEMENT, 03/02/81
DOE 1324.4, MICROGRAPHICS MANAGEMENT, 11/02/83
DOE 1324.5, RECORDS MANAGEMENT PROGRAM, 01/06/87
DOE 1324.6, AUTOMATED OFFICE ELECTRONIC RECORDKEEPING, 07/08/87
DOE 1324.7, DEPARTMENTAL HISTORY PROGRAM, 10/21/88
DOE N 1324.11, DISPOSITION OF PERSONAL PAPERS AND OPTICAL RECORDS, 09/21/88
DOE 1325.1A, DEPARTMENT OF ENERGY CORRESPONDENCE MANUAL, 06/18/81
DOE 1330, ACQUISITION AND MANAGEMENT OF COMPUTER SOFTWARE (Draft), 10/14/88
DOE 1330.1C, COMPUTER SOFTWARE MANAGEMENT, 01/12/90
DOE 1331.1C, PROCUREMENT AND ASSISTANCE DATA SYSTEM, 02/17/89
DOE 1332.1A, UNIFORM REPORTING SYSTEM, 10/15/85
DOE 1340.1A, MANAGEMENT OF PUBLIC COMMUNICATIONS PUBLICATIONS AND SCIENTIFIC,
TECHNICAL, AND ENGINEERING PUBLICATIONS, 08/25/82
DOE 1350.1, AUDIOVISUAL AND EXHIBITS MANAGEMENT, 10/28/81
DOE 1360.1A, ACQUISITION AND MANAGEMENT OF COMPUTING RESOURCES, 05/30/86
DOE 1360.2A, UNCLASSIFIED COMPUTER SECURITY PROGRAM, 05/20/88
DOE 1360.3B, AUTOMATIC DATA PROCESSING STANDARDS, 11/15/90
DOE 1360.4A, SCIENTIFIC AND TECHNICAL COMPUTER SOFTWARE, 10/07/87
DOE 1360.6, AUTOMATIC DATA PROCESSING EQUIPMENT/DATA SYSTEMS, 05/30/86
DOE 1360.7, USE OF TERMINALS AND MICROCOMPUTERS/WORD PROCESSORS OFF/SITE AS
WELL AS PRIVATE (PREAMBLE), 02/17/89
DOE 1360.8, ANALYSIS OF BENEFITS AND COSTS FOR INFORMATION TECHNOLOGY
RESOURCE INITIATIVES, 01/12/90
DOE 1370.2, COMPUTER/AIDED DESIGN, ENGINEERING, AND MANUFACTURING RESOURCES,
05/20/85
DOE 1430.1A, MANAGING SCIENTIFIC AND TECHNICAL INFORMATION, 09/10/86

DOE 1430.2A, SCIENTIFIC AND TECHNICAL INFORMATION PROGRAM, 12/14/87

DOE 1430.3, POLICY FOR THE DISSEMINATION OF AND ACCESS TO DEPARTMENTAL UNCLASSIFIED SCIENTIFIC AND TECHNICAL INFORMATION, 12/24/86

DOE 1430.4, LIBRARY SERVICES (PREAMBLE), 08/14/90

DOE 1450.1C, ACQUISITION, UTILIZATION, AND ADMINISTRATION OF TELEPROCESSING SERVICES, 09/03/86

DOE 1500.2A, TRAVEL POLICY AND PROCEDURES, 06/07/89

DOE 1500.3, FOREIGN TRAVEL AUTHORIZATION, 11/10/86

DOE 1500.4, TRAVEL CHARGE CARD PROGRAM, 05/04/88

DOE N 1500.33, CHANGES TO THE TRAVEL REGULATIONS, 10/07/88

DOE 1540.1, MATERIALS TRANSPORTATION AND TRAFFIC MANAGEMENT, 05/03/82

DOE 1540.2, Change 1, HAZARDOUS MATERIAL PACKAGING FOR TRANSPORT ADMINISTRATIVE PROCEDURES, 12/19/88

DOE 1540.3, BASE TECHNOLOGY FOR RADIOACTIVE MATERIAL TRANSPORTATION PACKAGING SYSTEMS, 02/29/88

DOE 1600.5, SYSTEM FOR PROCESSING COMPLAINTS OF DISCRIMINATION, 05/26/82

DOE 1600.6, CIVIL RIGHTS COMPLIANCE IN FEDERALLY ASSISTED PROGRAMS, 05/11/83

DOE 1700.1, Change 1, FREEDOM OF INFORMATION PROGRAM, 10/08/81

DOE 1800.1A, PRIVACY ACT, 08/31/84

DOE 1900.1D, FEDERAL REGISTER MANAGEMENT, 01/31/86

DOE 1900.2B, PROCEDURES FOR PROCESSING FEDERAL REGISTER DOCUMENTS, 01/31/86

DOE 2020.1, LEGISLATIVE IMPLEMENTATION PLAN, 11/07/78

DOE 2030.3, FEDERALISM GUIDELINES, 09/29/89

DOE 2100.4A, ADMINISTRATIVE CONTROL OF FUNDS, 04/29/83

DOE 2100.8, COST ACCOUNTING, COST RECOVERY, AND INTERAGENCY SHARING OF DATA PROCESSING FACILITIES, 03/03/83

DOE 2100.12, PAYMENTS FOR SPECIAL BURDENS AND IN LIEU OF TAXES, 11/16/87

DOE 2110.1A, PRICING OF DEPARTMENTAL MATERIALS AND SERVICES, 07/14/88

DOE 2200.2A, COLLECTION FROM CURRENT AND FORMER EMPLOYEES FOR INDEBTEDNESS TO THE UNITED STATES, 03/17/89

DOE 2200.4, ACCOUNTING OVERVIEW (ATTACHMENT 1), 03/31/88

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QC-1, Rev. 5, QUALITY CRITERIA, 06/01/89
QC-2, QUALITY CRITERIA (Draft), 10/25/89
RF 5000.3, Rev. 1, UNPLANNED EVENTS NOTIFICATION AND REPORTING SYSTEM, 04/15/89

**U.S. Nuclear Regulatory Commission
(NUREG) References**

A Handbook of Acronyms and Initialisms, NUREG-0544, Rev. 2, U.S. Nuclear Regulatory Commission,
Office of Administration, January 1985

Institute of Nuclear Power Operations (INPO) References

- 82-001-EPN-02, Conduct of a Direct-Reading Dosimeter Program (Quartz Fiber Pocket Dosimeters), September 1982
- 82-001-EPN-03, Comparison of Dosimetry Results, September 1982
- 82-001-OEN-09, Low Level Radioactive Waste Management, September 1982
- 82-001-OEN-08A, ALARA Planning for Station Work, September 1982
- 82-013, Emergency Operating Procedures Implementation Assistance Program, April 1982
- 82-016, Rev. 1, Emergency Operating Procedures Implementation Guideline, July 1983
- 82-022, Technical Development Programs for Technical Staff and Managers, September 1982
- 82-026, Technical Instructor Training and Qualification, October 1982
- 83-004, Emergency Operating Procedures Verification Guideline, March 1983
- 83-006, Emergency Operating Procedures Validation Guidelines, July 1983
- 83-016, Rev. 2, Chemistry Quality Control Program, August 1989
- 83-022, PWR Control Room Operator, Senior Control Room Operator, and Shift Supervisor Qualification, June 1983
- 83-032, Safe Work Procedure for Enclosed Volumes, October 1983
- 83-045, Plant Material Deficiency Identification, December 1983
- 84-001, Operations Narrative Log Books, January 1984
- 84-003, Guidelines for Quality Control Inspector and Nondestructive Examination Technician Training, January 1984
- 84-005, Rev. 1, Control of Operator Aids, February 1987
- 84-006, Rev. 1, Control and Calibration of Measuring and Test Equipment (M&TE), May 1986
- 84-019, Performance Monitoring - Management Information, June 1984
- 84-020, Review of Operations Department Procedures, July 1984
- 84-029, Post-Trip Reviews, September 1984
- 84-030, Rev. 1, Generic Round Sheets and Shift Operating Practices, September 1986
- 84-035, Rev. 1, Routine Condenser Performance Monitoring, May 1986
- 85-010, Surveillance and Periodic Task Scheduling Program, April 1985
- 85-013, Plant Modification Control Program, May 1985
- 85-014, Generic Guidance for Emergency Preparedness Review, May 1985
- 85-016, Rev. 1, Temporary Modification Control, February 1988
- 85-019, Rev. 1, Industry Operating Experience Review, February 1987
- 85-020, Rev. 1, In-House Operating Experience Review, February 1987
- 85-021, Control of Chemicals in Nuclear Power Plants, June 1985
- 85-023, Material Storage Controls, June 1985
- 85-025, BWR Control Room Operator, Senior Control Room Operator, and Shift Supervisor Qualification, June 1985
- 85-032, Preventive Maintenance, September 1985
- 85-033, Use of System Engineers, September 1985

85-037, Program to Enhance Reliable Power Station Operation, October 1985
 85-039, Rev. 1, Chemistry Analytical Data Review, February 1986
 86-001, Detection of Hydrocarbons and Halogenated Hydrocarbons with Total Organic Carbon Analyzers, January 1986
 86-002, Maintenance History Program, January 1986
 86-004, Plant Performance Monitoring - Development and Implementation, February 1986
 86-007, Heat Transfer, Fluid Flow, and Thermodynamics Instruction, January 1986
 86-014, Snubber Maintenance Program, April 1986
 86-018, Guidelines for Training and Qualification of Maintenance Personnel, July 1986
 86-019, Management Objectives Program, September 1986
 86-021, Safety System Unavailability Monitoring, August 1986
 86-024, Software Controls for Plant Computers, September 1986
 86-025, Guideline for Continuing Training of Licensed Personnel, October 1986
 86-025, Rev. 1, Guidelines for Continuing Training of Licensed Personnel, December 1989
 86-026, Guideline for Simulator Training, October 1986
 87-001, Fuel Integrity Monitoring, April 1987
 87-002, Tagging Procedures for the Protection of Personnel, Components, and Systems, May 1987
 87-003, Independent Verification, June 1987
 87-004, Guidelines for General Employee Training, July 1987
 87-006, Report on Configuration Management in the Nuclear Utility Industry, July 1987
 87-008, Guidelines for Training and Qualification of Radiological Protection Technicians, August 1987
 87-009, Control of Vendor Manuals, August 1987
 87-010, Guidelines for Training and Qualification of Chemistry Technicians, November 1987
 87-016, Simulator Configuration Management System, August 1987
 87-018, Operational Communications Verbal, October 1987
 87-018, Rev. 1, Operational Communications Verbal, February 1988
 87-021, Guideline for Training to Recognize and Mitigate the Consequences of Core Damage, November 1987
 87-023, Plant Inspection Program, October 1987
 87-028, Post-Maintenance Testing, December 1987
 87-029, Dissemination of Emergency Information to the Transient Population, December 1987
 88-004, Monitoring Personnel for Radioactive Contamination, March 1988
 88-009, System and Component Labeling, September 1988
 89-006, Hot Particle Controls Program, July 1989
 89-008, Control of Tools and Equipment in Radiologically Controlled Areas, August 1989
 90-003, Guidelines for the Training and Qualification of Shift Technical Advisors, January 1990
 90-004, Root Cause Analysis, January 1990

90-005, Human Performance Enhancement System, January 1990
90-011, The Nuclear Plant Reliability Data System (NPRDS) Program Description, September 1990
90-023, Maintenance Work Package Planning, December 1990
ACAD 90-010, Guidelines for Maintenance Supervisor Selection and Development, April 1990
ACAD 90-022, Guidelines for Simulator Training, November 1990
ACAD 90-025, Maintaining the Accreditation of Training in the Nuclear Power Industry,
December 1990
CP-201, Jurisdictional Control During Testing, February 1985
EP-804, Emergency Preparedness Training, June 1983
GPG-04, Nuclear Power Plant Non-Licensed Operators, March 1981
OE-904, Root Cause Evaluation of Human Performance Events, December 1986
OP-201, Shift Relief and Turnover, March 1984
OP-210, Review of Operations Department Procedures, July 1984
TS-403, Vendor Manual Specification and Procurement, June 1986
TS-415, Technical Reviews of Design Changes, March 1986

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